

# National Park Visitor Spending and Payroll Impacts 2006



Daniel J. Stynes  
Michigan State University

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National Park Service  
Social Science Program

Department of Community, Agriculture,  
Recreation and Resource Studies  
Michigan State University



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This report provides updated estimates of NPS visitor spending for 2006 and estimates the economic impacts of visitor spending and the NPS payroll on local economies. Visitor spending and impacts are estimated using the MGM2 model (Stynes et. al., 2000) based on calendar year 2006 park visits, spending averages from park visitor surveys, and local area economic multipliers. Impacts of the NPS payroll are estimated based on fiscal year 2006 payroll data for each park.

Visitor spending impacts are estimated for all park units with visitation data. Payroll impacts are estimated for all parks including administrative units and parks without visit count data. Impacts measure the direct and secondary effects of visitor spending and park payrolls on local economies in terms of jobs, income and value added<sup>1</sup>. Impacts of construction activity and park purchases of goods and services from local firms are not included. Local regions are defined as a 50 mile radius<sup>2</sup> around each park.

Direct effects cover businesses selling goods and services directly to park visitors. Secondary effects include indirect and induced effects resulting from sales to backward linked industries within the local region and household spending of income earned directly or indirectly from visitor spending. Sales in retail and wholesale trade sectors represent the margins accruing to local firms on goods sold to park visitors.

Systemwide totals are estimated by summing the spending and impact estimates for all park units. Results for individual park units are reported in the Appendix.

## Visitor Spending

The National Park System received 273 million recreation visits in 2006. Visitor spending was estimated by dividing visitors to each park into segments with distinct spending patterns and applying spending averages based on surveys of park visitors at selected parks. As spending averages are measured on a party day basis (party nights for overnight trips), the NPS counts of recreation visits are converted from person entries to a park to party days in the area by applying average party size, length of stay and park re-

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<sup>1</sup> Jobs include full time and part time jobs. Seasonal positions are adjusted to an annual basis. Personal income covers wages and salaries, including income of sole proprietors and payroll benefits. Value added is the sum of personal income, profits and rents, and indirect business taxes. It can also be defined as total sales net of the costs of all non-labor inputs. Value added is the preferred economic measure of the contribution of an industry or activity to the economy.

<sup>2</sup> The fifty mile radius is a general average representing the primary impact region around most parks. The radius is closer to 30 miles for parks in urban settings and can be as large as 100 miles for some western parks. Economic multipliers are based on regions defined as groupings of counties to approximate a 50 mile radius of the park.

entry factors. This adjusts for some double counting of visits. To the extent possible, spending not directly-related to a park visit is excluded<sup>3</sup>.

In 2006 there were 13.3 million recreation overnight stays in the parks representing 3% of all visits. Twenty-eight percent of park visits were day trips by local residents, 43% were day trips from 50 miles or more<sup>4</sup> and 29% involved an overnight stay near the park. Visitor spending depends on the number of days spent in the local area and also the type of lodging on overnight trips. Non-local day trips account for 36% of the party days spent in the local area, local day trips 27%, and overnight stays 37%. Two-thirds of all overnight stays by park visitors are in motels, lodges or B&B's outside the park, another 21% are in campgrounds outside the park and twelve percent are inside the park in NPS campgrounds, lodges or backcountry sites.

NPS Systemwide spending averages for 2006 are given in Table 1 for seven distinct visitor segments<sup>5</sup>. A typical park visitor party on a day trip spends \$39 if a local resident and \$69 if non-local (Table 1). Spending averages do not include park entry fees.

**Table 1. National Park Visitor Spending in the Local Area by Segment , 2006 (\$ per party per day/night)**

Spending category	Visitor Segment						
	Local Day Trip	Non-local Day Trip	Motel-In	Camp-In	Back-country	Motel-Out	Camp-Out
Motel, hotel cabin or B&B	0.00	0.00	154.43	0.00	7.86	100.95	0.00
Camping fees	0.00	0.00	0.00	18.79	3.49	0.00	22.58
Restaurants & bars	12.27	19.75	56.88	12.09	10.16	49.35	12.68
Amusements	4.37	9.23	19.67	7.75	6.02	16.66	14.68
Groceries	5.93	7.16	9.71	15.19	7.04	12.56	9.19
Gas & oil	7.40	17.88	21.81	19.26	16.99	16.93	16.83
Local transportation	0.51	1.23	3.33	1.20	0.75	2.58	1.05
<u>Souvenirs</u>	<u>8.22</u>	<u>13.94</u>	<u>24.81</u>	<u>11.00</u>	<u>15.21</u>	<u>22.57</u>	<u>18.36</u>
<b>Total</b>	<b>38.70</b>	<b>69.19</b>	<b>290.64</b>	<b>85.29</b>	<b>67.51</b>	<b>221.59</b>	<b>95.37</b>

On a party night basis, spending by visitors on overnight trips varies from \$68 for backcountry campers to \$291 for visitors staying in park lodges. Campers spend \$95 per night if staying outside the park and \$85 if staying inside the park. Spending averages at individual parks vary from these systemwide averages due to differences in local prices and spending opportunities. For example, while non-local visitors on day trips spent \$32

<sup>3</sup> For example, spending during extended stays in an area visiting relatives, on business, or when the park visit was not the primary trip purpose. For most historical sites and parks in urban areas spending for one day or night is counted for each park entry. Where several park units are within a 50 mile radius, adjustments are made for those visiting more than one park on the same day.

<sup>4</sup> Day trips include pass thru visitors not spending a night within 50 miles of the park as well as stays with friends and relatives and in owned seasonal homes.

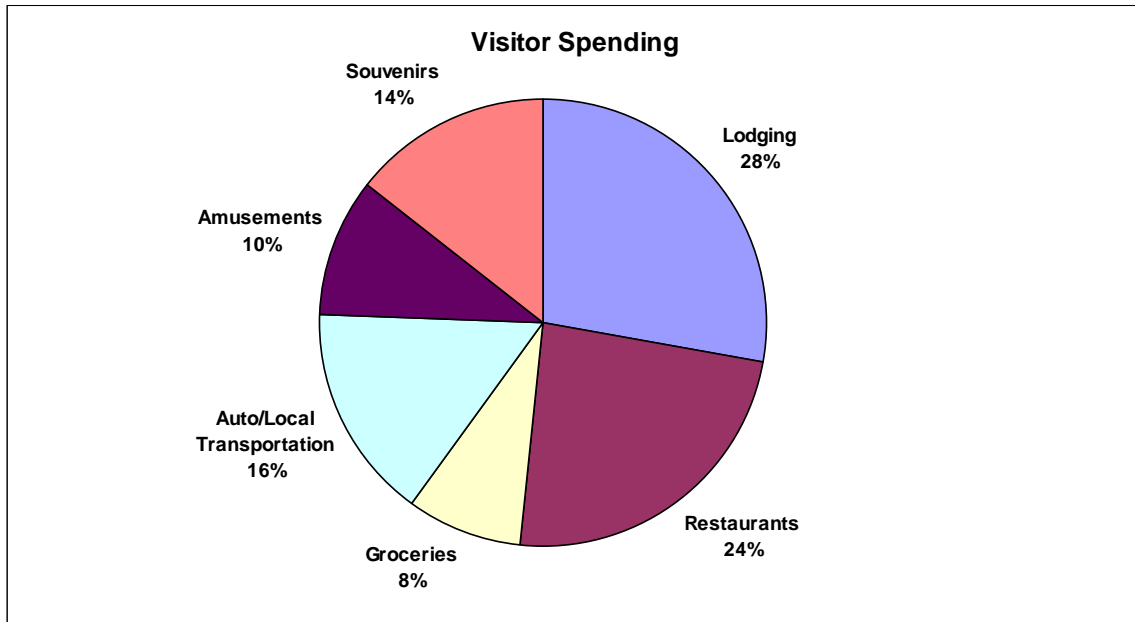
<sup>5</sup> Systemwide spending averages are compiled from averages at individual parks based on the distribution of visitors by park and segment. It is not possible to provide error estimates for the systemwide averages as parks with visitor surveys do not constitute a statistical sample of all park visitors. Over 14,000 NPS visitors have provided spending information since 2000. See the methods section for details on estimates of spending averages for individual parks.

per party at Craters of the Moon NM, their counterparts at Grand Canyon spent \$131. Visitors staying in park lodges spent over \$500 per party per night at Grand Teton NP.

In total, park visitors spent \$10.73 billion in the local region surrounding the parks in 2006<sup>6</sup>. Local residents account for 10% of this spending (Table 2). Visitors staying in motels and lodges outside the park account for over half of the total spending while non-local visitors on day trips contribute about a quarter of all spending. Over half of the visitor spending is for lodging and restaurant meals (Figure 1).

**Table 2. National Park Visitor Spending by Segment, 2006**

Segment	Total Spending \$Millions	Pct of Spending
Local Day Trip	\$1,086	10%
Non-local Day Trip	\$2,554	24%
Lodge-In Park	\$333	3%
Camp-In Park	\$240	2%
Backcountry Campers	\$38	0%
Motel-Outside Park	\$5,655	53%
Camp-Outside Park	\$755	7%
<u>Other Overnight Visitors</u>	<u>\$68</u>	<u>1%</u>
<b>Total</b>	<b>\$10,728</b>	<b>100%</b>



**Figure 1. Distribution of National Park Visitor Spending**

<sup>6</sup> Spending figures exclude airfares and other trip spending beyond 50 miles of the park. Purchases of durable goods (boats, RV's) and major equipment are also excluded. Special expenses for commercial rafting trips, air overflights, and other special activities are not fully captured for all parks.

## Impacts of Visitor Spending

Economic impacts of visitor spending are estimated in the MGM2 model using multipliers for local areas around each park<sup>7</sup>. Multipliers capture both the direct and secondary economic effects in gateway communities around the parks in terms of jobs, personal income, and value added. National totals are the sum of the local impacts for 355 park units that have counts of visitors.

Both economic significance and economic impacts were estimated. The economic significance estimates in Table 3 measure the impacts of all visitor spending (\$10.7 billion) including that of local visitors. Economic impacts in Table 4 exclude spending by local residents, estimating the impacts of the \$9.6 billion spent by visitors who do not reside within the local region.

Economic impact measures attempt to estimate the likely losses in economic activity to the region in the absence of the park<sup>8</sup>. Should the park opportunities not be available, it is assumed that local residents would spend the money on other local activities, while visitors from outside the region would not have made a trip to the region. Local resident spending is included in the economic significance measures, as these capture all economic activity associated with park visits, including local and non-local visitors. Spending by local residents on visits to the park do not represent “new money” to the region and are therefore generally excluded when estimating impacts.

To the extent possible, spending not directly associated with a park visit is also excluded in the impact estimates. For example, only one night’s expenses are counted for visitors in the area primarily on business, visiting relatives, or visiting other attractions. For parks with visitor surveys, spending attributed to a park visit was estimated based on the percentage of visitors identifying the park visit as the primary purpose of the trip.

### Economic Significance

The \$10.7 billion spent by park visitors within 50 miles of the park (Table 2) has a total local economic effect (significance) of \$13.0 billion in sales, \$4.5 billion in personal income, and \$7.0 billion in value added. Visitor spending supports about 213,000 jobs in gateway regions. Total effects may be divided between the direct effects that occur in businesses selling goods and services directly to park visitors and secondary effects that result from the circulation of this money within the local economy<sup>9</sup>.

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<sup>7</sup> Sets of sector-specific multipliers in the MGM2 model were estimated with the IMPLAN system for four types of regions varying in population size and levels of economic development. A region type is assigned to each park based on surrounding populations. MGM2 multipliers are based on IMPLAN’s Type II multipliers estimated with 2001 IMPLAN data for over 500 distinct regions. Job to sales ratios were adjusted to 2006 using the consumer price index.

<sup>8</sup> The impact estimates do not take into account economic activity that might be generated by alternative uses of parks lands and facilities. Impacts represent reductions in local economic activity associated with the loss of visitor spending attributable to park visits.

<sup>9</sup> Secondary effects include indirect effects of businesses buying goods and services from backward-linked local firms and induced effects of household spending of their earnings.

Direct effects are \$8.7 billion in sales, \$3.3 billion in personal income, \$4.9 billion in value added and 173,000 jobs. The local region captures 80% of all visitor spending as direct sales. Note that direct sales of \$8.7 billion is less than the \$10.7 billion in visitor spending as the manufacturing share of most retail purchases (groceries, gas, sporting goods, souvenirs) immediately leaks out of the region to cover the cost of goods sold. Sales figures for retail and wholesale trade are the margins on these purchases. A small share of the manufacturing of these goods (producer prices) is assigned to local production.

The average sales multiplier across all local park regions is 1.50, which means for every dollar of direct sales another \$ .50 in sales is generated in the region thru secondary effects.

**Table 3. Economic Significance of National Park Visitor Spending to Local Economies, 2006**

Sector/Spending category	Sales \$Millions	Jobs	Personal Income \$Millions	Value Added \$Millions
<b>Direct Effects</b>				
Motel, hotel cabin or B&B	\$2,780	54,389	\$1,221	\$1,986
Camping fees	\$235	1,577	\$29	\$69
Restaurants & bars	\$2,572	63,552	\$1,019	\$1,152
Amusements	\$1,067	21,148	\$394	\$662
Other vehicle expenses	\$112	811	\$21	\$49
Local transportation	\$32	690	\$14	\$16
Retail Trade	\$1,314	28,069	\$533	\$723
Wholesale Trade	\$230	2,090	\$87	\$153
<u>Local Production of goods</u>	<u>\$336</u>	<u>965</u>	<u>\$30</u>	<u>\$45</u>
<b>Total Direct Effects</b>	<b>\$8,679</b>	<b>173,292</b>	<b>\$3,348</b>	<b>\$4,857</b>
<u>Secondary Effects</u>	<u>\$4,334</u>	<u>39,515</u>	<u>\$1,167</u>	<u>\$2,148</u>
<b>Total Effects</b>	<b>\$13,013</b>	<b>212,807</b>	<b>\$4,516</b>	<b>\$7,006</b>

Note: Economic significance covers all \$10.7 billion in spending of park visitors in the local region, including that of local visitors.

### Economic Impacts

Excluding \$1.1 billion dollars spent by local residents on park visits reduces the total spending to \$9.6 billion (Table 2) for the impact analysis. Local visitors represent about 28% of all visits, but only 10% of all visitor spending. The total effects of visitor spending excluding locals is \$11.6 billion in sales, \$4.0 billion in personal income, \$6.2 billion in value added and 190,000 jobs. The four economic sectors most directly affected are lodging, restaurants, retail trade and amusements. Visitor spending supports roughly 54,000 jobs in each of the hotel and restaurant sectors, over 23,000 jobs in retail trade, and 18,000 jobs in the amusements sector.

**Table 4. Economic Impacts of National Park Visitor Spending on Local Economies, 2006**

Sector/Spending category	Sales \$Millions	Jobs	Personal Income \$Millions	Value Added \$Millions
<b>Direct Effects</b>				
Motel, hotel cabin or B&B	\$2,724	53,510	\$1,190	\$1,921
Camping fees	\$231	1,552	\$28	\$67
Restaurants & bars	\$2,181	54,093	\$859	\$964
Amusements	\$925	18,397	\$339	\$566
Other vehicle expenses	\$95	695	\$18	\$42
Local transportation	\$31	679	\$14	\$15
Retail Trade	\$1,092	23,418	\$440	\$593
Wholesale Trade	\$191	1,745	\$72	\$126
<u>Local Production of goods</u>	<u>\$273</u>	<u>773</u>	<u>\$24</u>	<u>\$36</u>
<b>Total Direct Effects</b>	<b>\$7,744</b>	<b>154,861</b>	<b>\$2,984</b>	<b>\$4,329</b>
<u>Secondary Effects</u>	<u>\$3,842</u>	<u>35,068</u>	<u>\$1,033</u>	<u>\$1,904</u>
<b>Total Effects</b>	<b>\$11,586</b>	<b>189,929</b>	<b>\$4,017</b>	<b>\$6,233</b>

Note: Economic impacts exclude spending of local visitors.

### Impacts of NPS payrolls

National park units also impact local economies through their own spending, especially NPS payrolls<sup>10</sup>. Payroll impacts were estimated for fiscal year (FY) 2006. In FY 2006 the National Park Service employed 24,284 people<sup>11</sup> with a total payroll of \$1,163 million in wages and salaries and \$302 million in payroll benefits (Table 5). The local economic impacts of park payrolls are \$1.8 billion in personal income, \$2.0 billion in value added and almost 36,000 jobs.

**Table 5. NPS Payroll Impacts on Local Economies, 2006**

Payroll	Salary	Payroll	Jobs
	(\$Millions)	Benefits (\$Millions)	
Park units with visit data	790	209	17,813
<u>Other units</u>	<u>373</u>	<u>92</u>	<u>6,471</u>
Total	1,163	302	24,284
	Personal Income	Value Added	
<b>Local Impacts</b>	(\$Millions)	(\$Millions)	Jobs
Park units with visit data	1,215	1,375	25,357
<u>Other units</u>	<u>585</u>	<u>664</u>	<u>10,447</u>
Total	1,800	2,039	35,804

<sup>10</sup> Impacts of park purchases of supplies, services, and construction are not addressed as information on the proportion of these expenses accruing to local firms is not readily available.

<sup>11</sup> The number of employees is estimated as an annual average for each park, so that seasonal positions are converted to annual equivalents. However, the job estimates include both full time and part time positions.

Impacts of park payrolls for each park unit were estimated by applying economic multipliers to wage and salary data to capture the induced effects of NPS employee spending on local economies. As with the MGM2 model, distinct multipliers were used for parks in rural areas, parks in or near small cities, and parks in larger metropolitan regions<sup>12</sup>. The overall employment multiplier for NPS jobs is 1.5. For every two NPS jobs, another job is supported through the induced effects of employee spending in the local region. There are additional local economic effects from NPS purchases of goods and services from local suppliers and from construction activity. These impacts were not estimated.

The visitor spending and payroll impacts may be combined, as park admission fees and most other visitor spending accruing to the National Park Service were omitted from the visitor spending figures to avoid double counting<sup>13</sup>. Using the visitor spending impact estimates from Table 4, which exclude spending of local visitors, the combined impacts are \$5.8 billion in personal income, \$8.3 billion in value added, and 226,000 local jobs. Visitor spending accounts for 84% of the total jobs and 75% of the total value added (Table 6).

**Table 6. Combined Impacts - Visitor Spending and Payroll, 2006**

Impact Measure	Visitor Spending Impacts <sup>a</sup>	NPS Payroll Impacts	Combined Impacts	Visitor Spending Share
<b>Direct Effects</b>				
Personal Income (\$Millions)	\$2,984	\$1,465	\$4,448	67%
Value Added (\$Millions)	\$4,329	\$1,465	\$5,793	75%
Jobs	154,861	23,978	178,839	87%
<b>Total Effects</b>				
Personal Income (\$Millions)	\$4,017	\$1,800	\$5,817	69%
Value Added (\$Millions)	\$6,233	\$2,039	\$8,272	75%
Jobs	189,929	35,804	225,733	84%

a. Excludes spending by local visitors

### State-by-State Impact Estimates

Economic impacts of individual parks can be aggregated to the state level with a few complications. While most parks fall within a single state, there are at least 20 park units with facilities in more than one state. For these parks, shares of visits were assigned to each state based on percentages provided by the NPS Public Use Statistics Office. It was assumed that spending and economic impacts are proportional to where the recreation visits were assigned. Estimates of recreation visits, spending and local economic impacts for each state and U.S. territory are given in Table A-4 in the Appendix. States receiving the greatest economic effects are California, Washington D.C., Arizona and North Carolina.

<sup>12</sup> Multipliers for household spending were estimated in IMPLAN using the spending patterns of households with incomes of \$50,000 - \$75,000.

<sup>13</sup> There will be some double counting of camping fees as payments to concessionaires could not be fully sorted out from payments to the NPS.



It should be noted that the state totals represent an accumulation of local impacts within roughly 50 miles of each park. The total economic effects on each state would be much larger if we estimated all spending of NPS visitors taking place within each state and used statewide multipliers instead of local ones to capture the secondary effects. As noted earlier, impacts reported here do not include long distance travel, airfares, or purchases made at home for items that may be used on trips to national parks.

### Trends 2001-2005

Recent trends in national park visits, spending and impacts are summarized in Table 7. Spending and economic impacts follow the trends in recreation visits. A small decline in visits in 2006 was offset by spending increases of 4.5% to yield an increase in overall visitor spending of 3.0%. For consistency with prior years, spending and impact figures in this table include local visitors. Impacts excluding local visitors are about 10% lower than when local visitors are included.

**Table 7. NPS System Recreation Visits, Spending and Impacts 2002-2006<sup>a</sup>**

	2002	2003	2004	2005	2006
Recreation Visits (Millions)	277.3	266.1	276.9	272.6 <sup>e</sup>	272.3 <sup>e</sup>
Party Days/Nights (Millions) <sup>b</sup>	107.6	103.2	107.3	105.6	103.4
Spending per party day	\$88	\$91	\$96	\$99	\$104
Total Spending (\$Millions)	\$9,509	\$9,403	\$10,281	\$10,423	\$10,727
<b>Direct Effects</b>					
Direct <sup>c</sup> Sales (\$Millions)	\$7,887	\$7,741	\$8,407	\$8,387	\$8,679
Direct jobs	191,381	183,767	193,478	186,807	173,292
Direct income (\$Millions)	\$2,787	\$2,737	\$2,973	\$2,992	\$3,348
Direct value added (\$Millions)	\$4,222	\$4,148	\$4,506	\$4,535	\$4,857
<b>Total Local effects<sup>d</sup></b>					
Total sales (\$ Millions)	\$11,459	\$11,240	\$12,206	\$12,238	\$13,013
Total jobs	240,806	231,102	243,398	234,803	212,807
Total income (\$Millions)	\$4,080	\$4,004	\$4,349	\$4,381	\$4,516
Total value Added (\$ Millions)	\$6,455	\$6,336	\$6,884	\$6,943	\$7,006

Note: All dollar figures are actual dollars, not adjusted for inflation.

a. Spending and impact figures include visitors from the local area.

b. Adjusts visits for park re-entries, party sizes, and length of stay in the region. Measured in days for day trips and nights for overnight trips. To the extent possible, only days/nights in the local area directly related to the park visit are counted. Average party sizes range from 2.0 - 3.0 across parks and visitor segments, systemwide the average party size is 2.6.

c. Direct effects accrue to tourism-related businesses selling goods and services directly to park visitors. Jobs include full time and part time jobs. Seasonal jobs are adjusted to an annual basis. Income is personal income including wages and salaries, income of sole proprietors, and payroll benefits. Value added includes all personal income, rents and profits and indirect business taxes.

d. Total local effects include direct, indirect and induced effects in the local regions around NPS units

e. Beginning in 2005, visits to Kings Canyon and Sequoia National Parks were combined for the economic analysis and the combined visits for the two units were reduced to account for some double counting.

Visit figures for these years are therefore slightly lower than those in the NPS Abstract.

## Methods

Spending and impacts were estimated using the Money Generation Model version 2 (MGM2). NPS public use statistics for calendar year 2006 provide estimates of the number of recreation visits and overnight stays at each park. For each park, recreation visits were allocated to the seven MGM2 segments<sup>14</sup>, converted to party days/nights spent in the local area and then multiplied by per day spending averages for each segment. Spending and impact estimates for 2006 are made individually for each park unit and then summed to obtain systemwide totals. The system totals are therefore a sum of local impacts at each park, not an overall estimate of the impacts on the national economy<sup>15</sup>.

Spending averages for seven distinct visitor segments based on visitor surveys at selected national parks over the past six years were price adjusted to 2006 using Bureau of Labor Statistics (BLS) price indices. Spending averages cover all trip expenses within roughly 50 miles of the park. They therefore exclude most en route expenses on longer trips, as well as airfares, and purchases made at home in preparation for the trip, including costs of durable goods and equipment.

Spending averages vary from park to park based on the type of park and the regional setting (low, medium or high spending area). For parks with recent visitor surveys, spending averages are estimated directly from the survey data with some adjustments for off-season use<sup>16</sup>. Parks without recent visitor spending studies are assigned the MGM2 high, medium, or low spending profiles based on manager or researcher judgments.

The segment mix is very important in estimating visitor spending as spending varies considerably across the MGM2 segments. Segment shares are estimated based on park overnight stay data and, where available, park visitor surveys. For park units that lack recent visitor surveys, estimates are made by generalizing from studies at similar parks or based on manager or researcher judgment.

For parks with VSP studies (Visitor Services Project) over the past seven years, spending averages are estimated from the survey data at each park<sup>17</sup>. Averages estimated

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<sup>14</sup> Visits are classified as local day trips, non-local day trips, and overnight trips staying in campgrounds or hotels, lodges, cabins and B&B's. For parks with lodging facilities within the park, visitors staying in park lodges, campgrounds or backcountry sites are distinguished from those staying outside the park in motels or non-NPS campgrounds. Visitors staying with friends or relatives, in owned seasonal homes, or passing through without a local overnight stay are generally treated as day trips.

<sup>15</sup> Applying park visitor spending to a national model/set of multipliers would capture 98% of visitor spending as direct sales (instead of the 80% that accrues to firms in the local regions around each park) and would also yield significantly larger secondary effects. National sales multipliers for tourism spending are about 2.5, while the average sales multiplier for local regions around parks is only 1.5.

<sup>16</sup> Most park surveys are conducted during the peak season, so estimates of segment shares and spending must be adjusted for seasonal differences.

<sup>17</sup> Detailed impact reports for parks that have included economic questions in their VSP studies are available at the MGM2 (<http://web4.canr.msu.edu/mgm2/>) or NPS social science websites (<http://www.nature.nps.gov/socialscience/products.cfm#MGM2Reports>).

in the surveys were price adjusted to 2006 using BLS price indices for each spending category. Sampling errors for the spending averages in VSP studies are generally 5-10% overall and can be as high as 20% for individual visitor segments.

The observed spending patterns in park visitor studies are then used to estimate spending averages for other parks that lack visitor spending surveys. This procedure will not capture some spending variations attributable to unique characteristics of a given park or gateway region, for example, the wider use of public transportation at Alaska parks or extra expenses for special commercial attractions in or around some parks, such as rafting trips, flightseeing and other tours. When visitor studies are conducted at individual parks, these unique situations are taken into account. For example, river runners were treated as a distinct segment at Grand Canyon National Park (Stynes and Sun 2005).

Multipliers for local regions around national parks<sup>18</sup> were applied to the spending totals to translate spending into jobs, income and value added and also to estimate secondary effects. All MGM2 multipliers were re-estimated for 2006 using 2001 IMPLAN data, based on the North American Industrial Classification System (NAICS). Previous MGM2 estimates employed multipliers from 1996 IMPLAN models with economic sectors based on SIC codes. The updating of multipliers reduces job estimates by about 10% compared to previous estimates, due to declining job to sales ratios in many of the key tourism-related sectors.

For most parks, we use generic multipliers built into the MGM2 model (Stynes and Sun 2000)<sup>19</sup>. The appropriate generic multipliers for each park are selected based on the population of the surrounding region. Generic multipliers were estimated as averages across over 100 distinct IMPLAN models for each type of region. The maximum observed absolute deviations between the IMPLAN multipliers for individual regions and the corresponding generic multiplier for that region are generally 10% or less and on average the differences are less than 5% (Chang 2001). The larger deviations, typically in job to sales ratios, can be due to errors in the underlying IMPLAN data. In this respect, the generic multipliers average out some errors in IMPLAN data for individual regions.

The generic approach to multipliers works well for tourism-related applications because the vast majority of visitor spending accrues to service industries. These sectors are quite labor intensive and the other inputs to production are primarily utilities and services that tend to exist in an area in direct proportion to population size. Hence secondary effects are predicted fairly well based on the local population size.

Note that the IMPLAN estimates of the ratios of income and value added to sales for each sector are essentially constant across regions since IMPLAN uses a national average production function for each sector. Only the IMPLAN estimates of job to sales

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<sup>18</sup> Multipliers are developed using the IMPLAN input-output modeling system (MIG, Inc.).

<sup>19</sup> For some parks we have used custom IMPLAN models estimated for the county or counties around the park to derive the multipliers. In all of these cases, the impact results with the custom multipliers were not significantly different than with the appropriate generics.

ratios and secondary effects vary significantly between regions and these variations are captured quite well for service and retail sectors by the population of the region.

With the exception of parks with new visitor surveys in 2004 or 2005, no changes were made in party sizes, lengths of stay or re-entry factors between 2005 and 2006. Local economic ratios and multipliers were also assumed constant, except for job to sales ratios, which were adjusted to 2006 based on the consumer price index. MGM2 model parameters for individual parks are adjusted over time as new park visitor studies are conducted or other relevant information becomes available.

Impacts of park payrolls were estimated for each park by applying local area multipliers to NPS wage and salary figures for FY 2006. Multipliers capture the induced effects of park employee spending by recirculating their income as household spending within the local economy. Payroll benefits were not re-circulated in estimating secondary effects of park employee spending, but the direct payroll benefits are included in total value added. Four sets of household spending multipliers were estimated to capture variations in impacts across regions based on population size<sup>20</sup>. Local impacts of park purchases of supplies and services or construction activities were not included in the analysis.

The number of employees for each park was estimated by totaling the number of distinct social security numbers in each pay period and dividing by the number of pay periods. The figure is therefore an annual average. Four seasonal jobs for three months count as one job. No distinction is made between part time and full time employees.

Jobs, salary and payroll benefits are assigned to the park where the employee's time was charged, which may differ from their duty station. Where possible, the unit org codes were used to separate out payroll data for parks that are administered under a different park alpha code<sup>21</sup>.

Spending and impact totals for states were developed from the 2005 estimates by simply summing the results for all units in a given state using the mailing address for the park to identify the state. For 2006, we identified 20 parks with facilities in more than one state. For these parks, visitors and spending were allocated to individual states based on shares provided by the NPS Public Use Statistics Office. For example, visits to Great Smoky Mountains NP were split 44% to North Carolina and 56% to Tennessee. It should be noted that these allocations may not fully account for where the spending and impacts occur. There are also many other parks with facilities in a single state, but located within 50 miles of a state border. A portion of the spending and impacts for these parks may

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<sup>20</sup> IMPLAN's spending patterns for households averaging \$50,000- \$75,000 were used to estimate the multipliers.

<sup>21</sup> Each park has a four letter alpha code. Budgets, however, are itemized by organization (org) codes. A given park may receive funds under several distinct org codes. Also, some smaller park units are administered under a different park that serves as the "home org". For example Eisenhower NHS is administered under Gettysburg NMP.

accrue to nearby states. For example, the local region for Saint-Gaudens NHS included counties in both Vermont and New Hampshire (Stynes, 2006a), but all impacts in this report are assigned to New Hampshire, since the visitor surveys do not identify exactly where spending may have occurred within the local region.

## **Errors and Limitations**

The accuracy of the spending and impact estimates rests largely on the input data, namely (1) public use recreation visit and overnight stay data, (2) party size, length of stay and park re-entry conversion factors, (3) visitor segment shares, (4) spending averages, and (5) local area multipliers.

Public use data provide reasonably accurate estimates of visitor entries for most parks. Some visitors may be missed by the counting procedures, while others may be counted multiple times when they re-enter a park more than once on a single trip. Accurate estimates of park re-entries, party sizes and lengths of stay in the area are needed to convert park entries to the number of visitor or party days in the region. Visitors staying overnight outside the park pose significant problems as they tend to be the greatest spenders and may enter the park several times during their stay. Similarly, visitors staying inside the park may enter and leave several times during their stay and be counted each time as a distinct visit. Re-entry factors adjust for these problems to the extent possible.

For multi-purpose trips, it is difficult to determine what portion of the spending should be attributed to the park visit. This is especially a problem for historic sites and parks in urban areas or parks in multiple-attraction destinations. For parks with visitor surveys, the proportion of days and spending counted was decided based on stated trip purposes and the importance of the park in generating the trip to the region.

Parkways and urban parks pose special difficulties for economic impact analyses. These units have some of the highest number of visits while posing the most difficult problems for estimating visits, spending and impacts. The majority of visits to these types of units were assumed to be local or non-local day trips and only one night of spending was counted for overnight trips. Due to the high numbers of visits at these units, small changes in assumed spending averages or segment mixes can swing the spending estimates by substantial amounts.

Clusters of parks within a single 50 mile area pose additional difficulties. For example, the many monuments and parks in the Washington D.C. area each count visitors separately. To avoid double counting of spending across many national capital parks, we must know how many times a visitor has been counted at park units during a trip to the Washington D.C. area. For parks in the national capital region, we currently assume an average of 1.7 park visits are counted for local day trips, 3.4 visits for non-local day trips and 5.1 park visits on overnight trips. Similar difficulties exist for clusters of parks in Boston, New York, and San Francisco.

Double counting of visits at Sequoia and Kings Canyon National Parks was sorted out in 2002 based on vehicle counts at each entrance (Stynes and Sun 2003). For parks that are at least 50 miles apart, the MGM2 procedure assigns spending based on the number of days/nights spent in the local area. It therefore avoids double counting of spending for visitors on extended trips visiting several parks that are at least 50 miles apart, a common pattern at many western parks.

### **Suggestions for Further Research**

Refinements to the impact estimates should focus first on the visitation data, as the number of visits drives the changes in spending and impact estimates over time. Analysts using NPS recreation visit data frequently interpret estimates of recreation visits as if these represent distinct trips rather than simply entries to the park. This confusion has resulted in many inflated estimates of visitor spending when trip spending averages are applied to recreation visits without adjustments for re-entries. The extent of potential double counting of visitors (due to re-entries to parks and parks in close proximity to one another) is not well known for many parks. It would be useful to more fully sort out the double counting problem at each park and to report both park entries and the number of distinct person trips.

In estimating spending it is quite important to be able to divide visitors into distinct segments with different spending patterns. Day visitors and locals spend much less than visitors on overnight trips. Spending of overnight visitors varies across lodging types. For parks lacking recent visitor surveys, the visitor segment mix is not well known. The mix of visitors may also change over time due to changes in populations surrounding the park and park use patterns. While park overnight stay data provides good estimates of overnight visitors who stay in the park, all other visitors are generally treated as day visitors (to the park), even though many are staying overnight in gateway communities.

Visitors staying overnight outside the park usually have the greatest economic impacts on the local economy. It is therefore important to distinguish between local residents, day trips from beyond 50 miles, and overnight stays in area motels, campgrounds or private homes. These segment shares can be estimated in visitor surveys. We also recommend that parks, in cooperation with regional tourist organizations, track lodging capacities and occupancy rates in gateway communities in order to better understand the mix of visitor accommodations inside and outside the park.

Deciding what proportion of trips and spending to attribute to a park visit is a difficult issue, particularly for smaller parks and historic sites that may not be the primary reason for many trips, but instead something for tourists to do while in an area. Attributing spending to the park visit requires more complete information about visitors including their trip purposes and other activities in the area (Tyrrell and Johnston 2001).

This information has been gathered in recent VSP studies, but it is not available for most parks. For visitors on multi-purpose trips, the share of trip expenses to be attributed to the park visit is inherently somewhat arbitrary. Theoretically, we would like to know which trips would not have been made in the absence of the park and/or what additional spending resulted from the park visit. These are sometimes difficult questions for visitors to answer.

The VSP program of conducting visitor surveys at a dozen or more parks each year should be continued. In addition to providing basic information about visitor characteristics, attitudes and park use patterns, VSP data supports the analysis of economic impacts of park visitors on local regions. Visitor spending averages used in the MGM2 model are refined each year as new visitor surveys are completed. The great diversity in NPS units, visitors, and spending opportunities poses difficulties in generalizing from one park to another. While price indices can be used to update spending averages over time, they may not fully account for possible structural changes in trip characteristics and spending patterns.

VSP studies could be supplemented with other studies of particular visitor segments with high or unique spending patterns. These segments might be tackled by sampling at several parks during a single year. Examples include national park campers and visitors in lodges, backcountry visitors, river runners, visitors on bus tours, and school groups, particularly at historic sites and nature centers. These types of visitors are often missed in VSP studies or the samples are too small to yield reliable spending averages.

The MGM2 generic multipliers were updated this year using 2001 IMPLAN data sets. The general practice is to develop custom IMPLAN models when estimating impacts in conjunction with a VSP survey, and to employ MGM2 generic multipliers for other parks. Unique multipliers for each park could be developed using the IMPLAN system. This would require the identification of counties to be included in the local region for each park.

The problems associated with sorting out impacts for parks that involve more than one state are likely best addressed on a case by case basis. Perhaps the best candidates for such studies would be parks in the Washington DC area, and the Blue Ridge and Natchez Trace Parkways. A regional analysis makes more sense than estimating impacts park by park in the DC area. For parkways and other parks involving multiple states, the specific locations of park entrances and commercial development dictate where the economic impacts will occur. Sorting out exactly where the impacts occur requires more detailed spatial analysis of visitor use and spending patterns at these parks. Such studies are best conducted for individual parks, where the additional data collection costs can be justified.

It is always useful to be able to ground spending and impact estimates in hard data and to attempt to triangulate across multiple sources. For parks with significant concession operations, park concessionaire data could be more fully utilized to validate

estimates of spending inside the park. Some parks support significant commercial operations around the park, such as whitewater rafting, flightseeing, horseback operations, and guided tours. These are not fully covered in our spending estimates, except for selected parks with recent visitor surveys.

Estimates of sales, income and jobs associated with national park visitors can also be compared with overall economic figures for a given area or with tourism impact estimates. However, local tourism estimates are sometimes exaggerated and one must be careful in comparing studies that may involve distinct methods and coverage. Tourism figures may include airfares and other items not covered in the MGM2 park impact figures. Impacts may also be reported in different units (e.g., jobs vs full time equivalents) or covering larger or smaller geographic areas.

Economic impact analyses rest considerably on the definition of the impact region. Cooperative studies with local tourism and regional development interests are recommended to better understand the role of each park in the area economy, and especially the park's role in attracting and serving visitors to an area. Visitor studies should cover information sources and patterns of use both within and outside the park, and especially the extent and use of lodging facilities near the park.

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## Appendix

### Visitor Spending and Payroll Impacts by Park, 2006

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**Table A-1. Spending and Local Economic Impacts by Park, CY 2006**

Park Unit	Public Use Data		Visitor Spending 2006		Impacts of Non-Local Visitor Spending		
	2006 Recreation Visits	2006 OVN stays	All Visitors (\$ 000's)	Non-Local Visitors (\$ 000's)	Jobs	Personal Income (\$ 000's)	Value Added (\$ 000's)
Abraham Lincoln Birthplace NHS	200,054	0	\$ 6,954	\$ 6,476	129	\$ 2,248	\$ 3,476
Acadia NP	2,083,588	127,157	132,340	129,476	2,604	51,707	80,029
Adams NHS	225,318	0	14,546	13,545	254	6,297	9,793
Agate Fossil Beds NM	13,521	0	470	438	9	152	235
Alibates Flint Quarries NM	1,882	0	93	87	2	35	54
Allegheny Portage Railroad NHS	121,009	0	6,009	5,596	113	2,235	3,459
Amistad NRA	1,599,271	35,312	45,405	39,465	787	13,702	21,186
Andersonville NHS	132,153	0	4,594	4,278	85	1,485	2,296
Andrew Johnson NHS	50,701	0	2,518	2,345	47	936	1,449
Antietam NB	282,676	3,730	13,510	12,127	244	4,843	7,496
*Apostle Islands NL	189,051	25,675	20,454	16,185	351	6,928	9,807
Appomattox Court House NHP	145,804	0	7,241	6,742	136	2,693	4,168
*Arches NP	833,049	51,855	80,439	80,439	1,949	30,318	47,839
Arkansas Post NMem	36,665	0	1,275	1,187	24	412	637
Arlington House, Robert E. Lee Mem	509,522	0	32,894	30,631	575	14,240	22,146
Assateague Island NS	1,932,817	95,576	137,071	130,325	2,621	52,046	80,554
Aztec Ruins NM	40,779	0	1,299	1,252	25	500	774
*Badlands NP	840,118	34,903	18,149	18,149	390	6,130	9,842
Bandelier NM	243,765	12,054	10,990	10,545	212	4,211	6,518
Bent's Old Fort NHS	26,483	0	921	857	17	298	460
Bering Land Bridge Npres	1,265	432	61	58	1	20	31
Big Bend NP	298,717	164,029	12,465	11,882	237	4,125	6,379
Big Cypress Npres	825,857	27,942	76,126	72,343	1,359	33,632	52,304
Big Hole NB	55,049	0	1,914	1,782	36	619	957
Big South Fork NRRRA	622,807	68,974	21,904	18,790	375	6,524	10,087
Big Thicket NPres	91,126	1,125	6,466	6,142	124	2,453	3,796
Bighorn Canyon NRA	177,414	13,121	5,117	4,475	89	1,554	2,402
*Biscayne NP	608,836	8,000	37,237	36,830	651	15,562	24,659
Black Canyon of the Gunnison NP	160,450	12,863	7,954	7,568	151	2,627	4,063
Blue Ridge Parkway	18,953,478	142,472	348,151	314,610	6,328	125,641	194,461
Bluestone NSR	46,093	0	1,857	1,610	32	643	995
Booker T. Washington NM	18,339	0	911	848	17	339	524
Boston African American NHS	255,060	0	16,466	15,333	288	7,128	11,086
Boston NHP	1,944,386	0	64,440	62,010	1,165	28,828	44,833
Brown V. Board of Education NHS	20,926	0	1,039	968	18	450	700
Bryce Canyon NP	890,676	128,125	45,645	43,572	869	15,128	23,391
Buck Island Reef NM	47,456	3,920	3,362	3,199	64	1,111	1,718
Buffalo National River	1,068,090	100,235	30,980	27,134	541	9,421	14,567

**Table A-1. Spending and Local Economic Impacts by Park, CY 2006**

Park Unit	Public Use Data		Visitor Spending 2006		Impacts of Non-Local Visitor Spending		
	2006 Recreation Visits	2006 OVN stays	All Visitors (\$ 000's)	Non-Local Visitors (\$ 000's)	Jobs	Personal Income (\$ 000's)	Value Added (\$ 000's)
Cabrillo NM	804,826	0	51,958	48,383	909	22,493	34,981
Canaveral NS	1,005,402	2,883	71,391	67,801	1,364	27,077	41,908
Cane River Creole NHP	34,453	0	1,711	1,593	32	553	855
Canyon de Chelly NM	826,635	56,135	39,691	36,960	743	14,760	22,845
Canyonlands NP	392,537	87,422	19,252	18,353	366	6,372	9,852
Cape Cod NS	4,487,716	17,720	153,381	114,037	2,274	39,592	61,219
Cape Hatteras NS	2,125,005	83,773	68,683	64,642	1,289	22,443	34,702
Cape Krusenstern NM	2,598	505	84	79	2	27	42
Cape Lookout NS	803,155	35,518	40,744	38,775	773	13,462	20,816
Capitol Reef NP	511,511	32,572	25,381	24,140	481	8,381	12,959
*Capulin Volcano NM	49,823	0	1,293	1,272	27	418	673
Carl Sandburg Home NHS	28,799	0	1,430	1,332	27	532	823
Carlsbad Caverns NP	407,367	95	19,639	18,989	382	7,583	11,737
Casa Grande Ruins NM	88,295	0	2,695	2,540	51	882	1,363
Castillo de San Marcos NM	630,903	0	40,730	37,928	712	17,632	27,422
Castle Clinton NM	3,415,397	0	87,515	78,473	1,474	36,482	56,736
Catoctin Mountain Park	526,898	37,619	25,270	23,531	473	9,397	14,545
Cedar Breaks NM	488,376	2,038	16,943	15,777	315	5,478	8,470
Central High School	35,264	0	1,751	1,631	33	651	1,008
Chaco Culture NHP	37,923	15,480	1,247	1,221	25	487	755
Chamizal NMem	221,048	0	14,270	13,289	250	6,178	9,608
Channel Islands NP	375,256	164,404	34,130	32,741	615	15,221	23,672
Charles Pinckney NHS	36,556	0	1,815	1,690	34	675	1,045
Chattahoochee River NRA	2,842,670	0	78,252	52,575	988	24,442	38,012
*Chesapeake & Ohio Canal NHP	3,039,178	4,276	36,410	23,489	513	11,504	17,867
Chickamauga & Chattanooga NMP	919,892	1,806	45,638	42,499	855	16,972	26,269
Chickasaw NRA	1,343,793	72,754	38,548	33,636	671	11,678	18,057
Chiricahua NM	61,579	9,792	2,825	2,630	53	1,050	1,626
Christiansted NHS	100,868	0	3,506	3,265	65	1,134	1,753
City of Rocks NRES	77,131	0	5,478	5,202	105	2,078	3,216
Clara Barton NHS	12,495	0	807	751	14	349	543
*Colonial NHP	3,344,018	0	47,325	6,107	142	2,948	4,612
Colorado NM	332,654	12,954	16,212	15,096	304	6,029	9,331
Congaree Swamp NM	134,045	2,225	6,609	6,154	124	2,458	3,804
Coronado Nmem	70,063	0	2,436	2,268	45	787	1,218
Cowpens NB	143,664	204	7,129	6,639	134	2,651	4,104
*Crater Lake NP	388,972	61,893	27,988	27,187	641	9,850	15,842
*Craters of the Moon NM	176,998	11,860	4,847	4,303	68	1,683	2,404
Cumberland Gap NHP	936,929	15,790	46,165	42,990	865	17,168	26,572

**Table A-1. Spending and Local Economic Impacts by Park, CY 2006**

Park Unit	Public Use Data		Visitor Spending 2006		Impacts of Non-Local Visitor Spending		
	2006 Recreation Visits	2006 OVN stays	All Visitors (\$ 000's)	Non-Local Visitors (\$ 000's)	Jobs	Personal Income (\$ 000's)	Value Added (\$ 000's)
Cumberland Island NS	44,025	13,005	3,086	2,949	59	1,178	1,823
Curecanti NRA	936,380	50,952	38,375	33,486	673	13,373	20,698
Cuyahoga Valley NP	2,468,816	4,472	50,110	36,134	679	16,799	26,125
*Dayton Aviation Heritage NHP	51,771	0	2,525	1,399	33	702	1,039
De Soto Nmem	245,503	0	15,849	14,759	277	6,861	10,671
Death Valley NP	744,440	212,627	38,081	36,476	727	12,664	19,582
Delaware Water Gap NRA	5,254,216	110,246	131,738	115,323	2,319	46,055	71,282
Denali NP & Pres	415,935	99,757	29,241	27,910	561	11,146	17,251
Devils Postpile NM	105,303	4,027	3,593	3,346	67	1,162	1,796
Devils Tower NM	335,764	8,918	11,523	10,730	214	3,725	5,760
Dinosaur NM	278,473	47,097	9,037	8,416	168	2,922	4,518
Dry Tortugas NP	64,122	14,840	5,881	5,616	105	2,611	4,060
Edgar Allan Poe NHS	12,409	0	801	746	14	347	539
Edison NHS	8,753	0	565	526	10	245	380
*Effigy Mounds NM	90,199	0	4,902	1,875	38	702	1,044
*Eisenhower NHS	70,243	0	4,181	4,151	106	1,604	2,572
El Malpais NM	107,792	520	4,052	3,880	77	1,347	2,083
El Morro NM	52,297	2,753	1,880	1,796	36	624	964
Eleanor Roosevelt NHS	14,493	0	504	469	9	163	252
Eugene O'Neill NHS	3,372	0	218	203	4	94	147
Everglades NP	954,022	36,241	50,351	48,577	912	22,583	35,121
Federal Hall NMem	12,800	0	826	769	14	358	556
Fire Island NS	636,030	39,677	33,621	27,919	562	11,149	17,257
First Ladies NHS	11,219	0	724	674	14	269	417
Florissant Fossil Beds NM	56,094	0	2,786	2,594	52	1,036	1,603
Ford's Theatre NHS	857,600	0	24,783	22,543	423	10,480	16,299
Fort Bowie NHS	10,679	0	530	494	10	197	305
Fort Caroline NMem	224,114	0	14,468	13,473	253	6,264	9,741
Fort Davis NHS	49,091	0	1,706	1,589	32	552	853
Fort Donelson NB	213,521	1,502	7,397	6,888	137	2,392	3,698
Fort Frederica NM	316,611	0	15,723	14,641	294	5,847	9,050
Fort Laramie NHS	40,651	0	1,413	1,316	26	457	706
Fort Larned NHS	31,512	0	1,095	1,020	20	354	548
Fort Matanzas NM	922,315	0	59,542	55,446	1,041	25,777	40,087
Fort McHenry NM & HS	622,419	0	40,182	37,418	703	17,395	27,053
Fort Necessity NB	221,598	149	7,350	6,339	126	2,201	3,403
Fort Point NHS	1,613,853	0	104,186	97,019	1,822	45,104	70,144
Fort Pulaski NM	333,378	19	16,555	15,416	310	6,157	9,529
Fort Raleigh NHS	299,432	0	10,409	9,693	193	3,365	5,203

**Table A-1. Spending and Local Economic Impacts by Park, CY 2006**

Park Unit	Public Use Data		Visitor Spending 2006		Impacts of Non-Local Visitor Spending		
	2006 Recreation Visits	2006 OVN stays	All Visitors (\$ 000's)	Non-Local Visitors (\$ 000's)	Jobs	Personal Income (\$ 000's)	Value Added (\$ 000's)
Fort Scott NHS	24,269	0	844	786	16	273	422
Fort Smith NHS	77,014	0	3,824	3,561	72	1,422	2,201
*Fort Stanwix NM	60,589	0	2,097	2,011	43	827	1,323
Fort Sumter NM	776,162	1	18,917	16,505	310	7,673	11,933
Fort Union NM	10,347	0	241	231	5	80	124
Fort Union Trading Post NHS	13,392	0	466	434	9	151	233
Fort Vancouver NHS	690,307	0	34,280	31,922	642	12,748	19,731
Fort Washington Park	315,390	0	9,114	8,290	156	3,854	5,994
Fossil Butte NM	16,631	0	578	538	11	187	289
Franklin Delano Roosevelt Memorial	2,662,016	0	76,929	69,974	1,314	32,531	50,591
Frederick Douglass NHS	17,947	0	519	472	9	219	341
Frederick Law Olmsted NHS	1,559	0	101	94	2	44	68
Fredericksburg & Spotsylvania NMP	499,324	0	24,796	23,090	464	9,221	14,272
Friendship Hill NHS	25,636	0	1,655	1,541	29	716	1,114
Gates of the Arctic NP & Pres	9,982	6,040	474	454	9	157	244
Gateway NRA	8,456,456	8,582	143,335	58,149	1,092	27,033	42,042
Gauley River NRA	116,854	5,342	4,776	4,163	84	1,663	2,573
General Grant NMem	105,657	0	6,821	6,352	119	2,953	4,592
George Rogers Clark NHP	128,579	0	6,385	5,946	120	2,375	3,675
*George Washington Birthplace NM	135,870	0	2,878	1,509	28	538	780
George Washington Carver NM	37,167	0	1,846	1,719	35	686	1,062
George Washington Memorial Pkwy	6,872,213	0	27,341	3,976	75	1,848	2,874
*Gettysburg NMP	1,666,365	21,005	98,250	97,548	2,489	37,696	60,430
Gila Cliff Dwellings NM	40,510	0	1,076	1,036	21	360	556
Glacier Bay NP & Pres	413,382	14,237	20,684	19,665	392	6,828	10,557
Glacier NP	1,964,399	331,471	82,138	78,402	1,577	31,310	48,461
Glen Canyon NRA	1,885,378	1,148,735	127,042	123,456	2,483	49,303	76,309
Golden Gate NRA	13,486,824	56,107	231,681	96,333	1,809	44,785	69,649
Golden Spike NHS	45,381	0	2,254	2,099	42	838	1,297
Governors Island NM	43,135	0	3,983	3,782	71	1,758	2,735
*Grand Canyon NP	4,279,439	1,206,725	382,888	382,888	9,747	152,426	238,707
Grand Portage NM	53,443	154	5,889	5,864	117	2,036	3,148
*Grand Teton NP	2,406,476	553,327	234,765	229,020	3,346	93,377	144,447
Grant-Kohrs Ranch NHS	19,795	0	688	641	13	222	344
Great Basin NP	78,524	27,624	3,863	3,700	74	1,285	1,986
Great Sand Dunes NM	258,660	40,969	8,316	7,744	154	2,689	4,157
Great Smoky Mountains NP	9,289,215	362,007	685,293	672,377	12,630	312,586	486,126
Greenbelt Park	195,038	19,440	11,989	11,164	210	5,190	8,072
Guadalupe Mountains NP	174,157	17,683	12,324	11,731	236	4,685	7,251

**Table A-1. Spending and Local Economic Impacts by Park, CY 2006**

Park Unit	Public Use Data		Visitor Spending 2006		Impacts of Non-Local Visitor Spending		
	2006 Recreation Visits	2006 OVN stays	All Visitors (\$ 000's)	Non-Local Visitors (\$ 000's)	Jobs	Personal Income (\$ 000's)	Value Added (\$ 000's)
Guilford Courthouse NMP	486,162	0	24,143	22,482	452	8,978	13,896
Gulf Islands NS	1,986,816	4,935	43,185	26,993	543	10,780	16,684
Hagerman Fossil Beds NM	25,875	0	727	648	13	225	348
Haleakala NP	1,426,068	17,286	101,244	96,176	1,934	38,408	59,447
Hamilton Grange NMem	6,369	0	411	383	7	178	277
Hampton NHS	29,297	0	1,891	1,761	33	819	1,273
Harpers Ferry NHP	267,501	0	13,284	12,370	249	4,940	7,646
Harry S Truman NHS	34,479	0	2,226	2,073	39	964	1,499
Hawaii Volcanoes NP	1,612,246	147,959	115,829	110,320	2,219	44,057	68,189
Herbert Hoover NHS	134,980	0	6,703	6,242	126	2,493	3,858
Home of Franklin D. Roosevelt N	117,166	0	7,564	7,044	140	2,445	3,781
Homestead National Monument	53,667	0	1,866	1,737	35	603	933
Hopewell Culture NHP	30,336	0	1,055	982	20	341	527
Hopewell Furnace NHS	49,239	0	2,445	2,277	46	909	1,407
Horseshoe Bend NMP	70,067	0	3,480	3,240	65	1,294	2,003
Hot Springs NP	1,273,456	6,150	90,432	85,891	1,728	34,301	53,090
Hovenweep NM	26,348	1,336	1,277	1,189	24	475	735
Hubbell Trading Post NHS	72,516	0	3,601	3,353	67	1,339	2,073
Independence NHP	3,532,245	0	128,024	114,619	2,153	53,286	82,869
Indiana Dunes NL	1,938,132	28,165	55,338	35,435	706	12,303	19,023
Isle Royale NP	17,070	51,816	1,851	1,851	37	643	994
James A. Garfield NHS	19,916	0	1,286	1,197	22	557	866
Jean Lafitte NHP & PRES	264,680	0	13,144	12,240	246	4,888	7,565
Jefferson National Expansin. Mem.	2,572,072	0	101,189	90,475	1,699	42,062	65,413
Jewel Cave NM	97,395	0	4,837	4,504	91	1,799	2,784
Jimmy Carter NHS	86,016	0	2,990	2,784	56	967	1,495
John D Rockefeller Jr. Mem Pkwy	1,034,954	35,594	4,258	3,841	77	1,534	2,374
*John Day Fossil Beds NM	119,656	300	5,074	3,300	61	1,202	1,783
John Fitzgerald Kennedy NHS	6,490	0	419	390	7	181	282
John Muir NHS	29,499	0	1,904	1,773	33	824	1,282
Johnstown Flood Nmem	112,239	0	5,574	5,190	104	2,073	3,208
*Joshua Tree NP	1,256,421	250,975	30,255	25,662	475	11,481	16,660
Kalaupapa NHP	46,839	0	2,326	2,166	44	865	1,339
Kaloko-Honokohau NHP	112,344	0	5,579	5,195	104	2,075	3,211
Katmai NP & Pres/Aniakchak	68,690	28,839	3,461	3,316	66	1,151	1,780
Kenai Fjords NP	251,630	2,873	17,860	16,965	341	6,775	10,486
Kennesaw Mountain NBP	1,316,129	0	38,063	33,069	621	15,373	23,908
Kings Mountain NMP	259,287	113	12,874	11,989	241	4,788	7,410
Klondike Gold Rush NHP Alaska	903,079	5,839	31,314	29,159	581	10,124	15,654

**Table A-1. Spending and Local Economic Impacts by Park, CY 2006**

Park Unit	Public Use Data		Visitor Spending 2006		Impacts of Non-Local Visitor Spending		
	2006 Recreation Visits	2006 OVN stays	All Visitors (\$ 000's)	Non-Local Visitors (\$ 000's)	Jobs	Personal Income (\$ 000's)	Value Added (\$ 000's)
Klondike Gold Rush NHP Seattle	53,107	0	3,428	3,193	60	1,484	2,308
Knife River Indian Villages NHS	24,235	0	842	784	16	272	421
Kobuk Valley NP	3,005	509	147	140	3	49	75
Korean War Veterans Memorial	3,248,757	0	93,885	85,397	1,604	39,701	61,742
Lake Chelan NRA	35,151	11,668	1,260	1,147	23	398	616
Lake Clark NP & Pres	5,320	1,665	369	352	7	141	217
Lake Mead NRA	7,777,753	807,378	275,747	227,149	4,529	78,863	121,942
Lake Meredith NRA	1,037,610	48,426	42,403	36,962	743	14,761	22,847
Lake Roosevelt NRA	1,281,586	112,016	37,218	32,610	650	11,322	17,506
Lassen Volcanic NP	388,741	71,306	14,795	13,021	245	6,053	9,414
Lava Beds NM	104,490	11,997	4,903	4,566	92	1,823	2,822
LBJ Memorial Grove on the Potomac	470,683	0	30,386	28,296	531	13,155	20,458
Lewis & Clark National Historic	218,816	0	10,866	10,119	204	4,041	6,254
Lincoln Boyhood NMem	123,781	0	6,147	5,724	115	2,286	3,538
Lincoln Home NHS	388,887	0	19,312	17,983	362	7,182	11,116
Lincoln Memorial	3,810,347	0	110,114	100,159	1,881	46,564	72,415
Little Bighorn Battlefield NM	298,518	0	10,377	9,663	193	3,355	5,188
Little River Canyon NPRES	211,047	0	10,492	9,964	199	3,460	5,349
Longfellow NHS	43,108	0	2,141	1,993	40	796	1,232
Lowell NHP	632,234	0	40,815	38,008	714	17,670	27,479
Lyndon B. Johnson NHP	78,792	0	5,087	4,737	89	2,202	3,425
Maggie L Walker NHS	7,803	0	164	86	2	35	53
Mammoth Cave NP	597,934	69,661	35,562	33,051	659	11,475	17,743
Manassas NBP	674,851	0	11,837	11,431	215	5,314	8,265
*Manzanar NHS	88,200	0	8,180	2,587	48	1,064	1,586
Marsh-Billings Rockefeller NHP	22,484	0	1,117	1,040	21	415	643
Martin Luther King Jr NHS	791,617	0	51,105	47,589	894	22,124	34,407
Martin Van Buren NHS	24,735	0	493	463	9	161	248
Mary McLeod Bethune NHS	16,858	0	487	443	8	206	320
Mesa Verde NP	557,248	89,294	41,562	39,727	799	15,865	24,555
Minute Man NHP	1,084,041	0	69,983	65,169	1,224	30,297	47,117
Minuteman Missile NHS	16,754	0	582	542	11	188	291
Missouri National Recreational	167,960	0	8,350	7,930	158	2,753	4,257
Mojave Npres	537,250	1,736	6,896	6,325	127	2,526	3,910
Monocacy NB	18,579	0	1,199	1,117	21	519	808
Montezuma Castle NM	597,762	0	29,685	27,643	556	11,039	17,086
Moores Creek NB	44,378	0	1,543	1,437	29	499	771
Morristown NHP	277,748	0	13,793	12,844	258	5,129	7,939
*Mount Rainier NP	1,113,601	134,737	28,823	27,409	580	11,442	17,907



**Table A-1. Spending and Local Economic Impacts by Park, CY 2006**

Park Unit	Public Use Data		Visitor Spending 2006		Impacts of Non-Local Visitor Spending		
	2006 Recreation Visits	2006 OVN stays	All Visitors (\$ 000's)	Non-Local Visitors (\$ 000's)	Jobs	Personal Income (\$ 000's)	Value Added (\$ 000's)
Mount Rushmore Nmem	1,989,771	0	70,534	67,723	1,362	27,046	41,860
Muir Woods NM	741,768	0	47,887	44,592	838	20,731	32,240
Natchez NHP	272,091	0	13,512	12,582	253	5,025	7,777
Natchez Trace Parkway	5,713,583	22,947	83,249	26,750	538	10,683	16,534
National Capital Parks Central	3,803,244	0	109,909	99,973	1,878	46,477	72,280
National Capital Parks East	1,310,321	0	37,866	34,443	647	16,013	24,902
National World War II Memorial	3,865,430	0	111,706	101,607	1,909	47,237	73,462
Natural Bridges NM	91,288	5,059	4,413	4,109	83	1,641	2,540
Navajo NM	71,595	2,585	3,496	3,256	65	1,300	2,012
New Bedford Whaling NHP	343,774	0	22,193	20,666	388	9,608	14,942
New Orleans Jazz NHP	34,375	0	1,707	1,590	32	635	983
*New River Gorge NR	1,124,688	10,560	41,865	39,459	749	15,648	23,040
Nez Perce NHP	155,802	0	5,416	5,043	101	1,751	2,707
Nicodemus NHS	21,441	0	745	694	14	241	373
Ninety Six NHS	33,786	0	1,678	1,562	31	624	966
Niobrara NSR	60,397	0	3,003	2,852	57	990	1,531
Noatak Npres	3,272	1,061	159	151	3	53	81
North Cascades NP	19,167	16,072	1,275	1,226	25	490	758
Obed Wild and Scenic River	185,176	1,615	7,478	6,489	131	2,591	4,011
Ocmulgee NM	140,239	0	6,964	6,485	130	2,590	4,008
*Olympic NP	2,749,197	338,466	93,076	85,848	1,839	36,130	56,642
Oregon Caves NM	78,900	6,780	3,750	3,492	0	0	0
Organ Pipe Cactus NM	313,103	23,113	15,001	13,969	281	5,579	8,634
Ozark National Scenic Riverways	1,491,380	164,550	62,366	54,780	1,102	21,877	33,860
Padre Island NS	730,994	59,107	51,750	49,232	990	19,661	30,430
Palo Alto Battlefield NHS	32,117	0	1,116	1,040	21	361	558
Pea Ridge NMP	66,177	0	3,286	3,060	62	1,222	1,892
Pecos NHP	34,106	0	738	718	14	249	386
Pennsylvania Avenue NHS	191,677	0	5,539	5,038	95	2,342	3,643
Perry's Victory & Int.I Peace Mem	107,908	2,800	3,704	3,450	69	1,198	1,852
Petersburg NB	152,889	0	7,592	7,070	142	2,823	4,370
Petrified Forest NP	581,681	142	41,312	39,233	789	15,668	24,250
Petroglyph NM	121,825	0	5,279	4,167	78	1,937	3,013
*Pictured Rocks NL	419,298	26,256	16,660	16,406	368	5,745	9,310
Pinnacles NM	158,824	13,976	3,425	2,979	59	1,034	1,599
Pipe Spring NM	50,923	0	2,529	2,355	47	940	1,456
Pipestone NM	66,867	0	4,081	3,994	80	1,387	2,144
Piscataway Park	199,443	0	5,764	5,243	98	2,437	3,790
Point Reyes NS	2,065,083	32,879	93,943	86,481	1,624	40,205	62,526

**Table A-1. Spending and Local Economic Impacts by Park, CY 2006**

Park Unit	Public Use Data		Visitor Spending 2006		Impacts of Non-Local Visitor Spending		
	2006 Recreation Visits	2006 OVN stays	All Visitors (\$ 000's)	Non-Local Visitors (\$ 000's)	Jobs	Personal Income (\$ 000's)	Value Added (\$ 000's)
President's Park	1,061,387	0	30,673	27,900	524	12,971	20,171
Prince William Forest Park	209,312	63,085	6,964	5,445	102	2,532	3,937
Pu'uhonua o Honaunau NHP	485,145	0	24,092	22,435	451	8,959	13,867
Puukohola Heiau NHS	98,026	0	4,868	4,533	91	1,810	2,802
Rainbow Bridge NM	87,642	0	4,352	4,053	82	1,619	2,505
Redwood NP	383,780	13,420	17,417	15,227	306	6,081	9,412
Richmond NBP	141,151	0	8,828	7,957	160	3,178	4,918
Rio Grande WSR	135	953	6	6	0	2	3
Rock Creek Park	2,181,863	0	63,053	57,353	1,077	26,663	41,466
Rocky Mountain NP	2,743,676	206,250	195,957	192,230	3,833	66,740	103,196
Roger Williams Nmem	52,671	0	3,400	3,166	59	1,472	2,289
Ross Lake NRA	265,022	48,458	8,021	7,105	142	2,467	3,814
Russell Cave NM	24,851	0	1,234	1,149	23	459	710
Sagamore Hill NHS	43,719	0	2,822	2,628	49	1,222	1,900
Saguaro NP	619,983	1,552	44,025	41,811	841	16,697	25,843
Saint Croix NSR	506,841	82,689	14,578	12,779	255	4,437	6,860
Saint Paul's Church NHS	14,431	0	932	868	16	403	627
*Saint-Gaudens NHS	25,858	0	924	645	14	323	480
Salem Maritime NHS	761,945	0	49,189	45,805	860	21,295	33,117
Salinas Pueblo Missions NM	32,996	0	1,240	1,188	24	412	638
San Antonio Missions NHP	1,173,771	0	42,543	38,088	715	17,707	27,538
San Francisco Maritime NHP	3,984,645	10,961	76,905	56,877	1,068	26,442	41,122
San Juan Island NHP	258,804	0	16,708	15,558	292	7,233	11,249
San Juan NHS	1,167,558	0	57,981	53,992	1,086	21,562	33,372
Santa Monica Mountains NRA	534,378	144	20,128	11,932	224	5,547	8,627
Saratoga NHP	99,581	0	3,462	3,223	64	1,119	1,730
Saugus Iron Works NHS	11,153	0	720	670	13	312	485
Scotts Bluff NM	98,352	0	2,531	2,104	42	840	1,301
*Sequoia/Kings Canyon NP <sup>a</sup>	1,166,629	365,610	80,934	74,635	1,651	33,071	51,780
Shenandoah NP	1,076,150	252,114	45,922	41,073	819	14,260	22,050
Shiloh NMP	335,657	0	11,668	10,865	217	3,772	5,833
Sitka NHP	331,393	0	11,520	10,727	214	3,724	5,759
Sleeping Bear Dunes NL	1,213,026	109,572	33,427	26,506	528	9,203	14,229
Springfield Armory NHS	17,115	0	1,105	1,029	19	478	744
Statue of Liberty NM	3,263,585	0	131,574	118,569	2,227	55,123	85,725
Steamtown NHS	61,178	0	2,127	1,980	39	688	1,063
Stones River NB	201,016	0	9,982	9,296	187	3,712	5,746
Sunset Crater Volcano NM	221,406	0	10,995	10,239	206	4,089	6,328
Tallgrass Prairie NPRes	27,260	0	1,355	1,287	26	447	691

**Table A-1. Spending and Local Economic Impacts by Park, CY 2006**

Park Unit	Public Use Data		Visitor Spending 2006		Impacts of Non-Local Visitor Spending		
	2006 Recreation Visits	2006 OVN stays	All Visitors (\$ 000's)	Non-Local Visitors (\$ 000's)	Jobs	Personal Income (\$ 000's)	Value Added (\$ 000's)
Thaddeus Kosciuszko NMem	3,990	0	258	240	5	112	173
Theodore Roosevelt Birthplace NHS	10,713	0	692	644	12	299	466
Theodore Roosevelt Inaugural NHS	13,218	0	853	795	15	369	575
Theodore Roosevelt Island	103,324	0	6,670	6,211	117	2,888	4,491
Theodore Roosevelt NP	435,359	20,768	21,612	20,547	410	7,134	11,030
Thomas Jefferson Memorial	2,219,255	0	64,133	58,336	1,096	27,120	42,176
Thomas Stone NHS	5,019	0	324	302	6	140	218
Timpanogos Cave NM	110,840	0	7,156	6,663	125	3,098	4,818
Timucuan Ecological & Historic Pres	1,011,989	0	93,437	88,735	1,667	41,253	64,155
Tonto NM	63,733	0	3,165	2,947	59	1,177	1,822
Tumacacori NHP	45,015	0	1,565	1,457	29	506	782
Tuskegee Airmen NHS	11,345	0	563	525	11	210	324
Tuskegee Institute NHS	72,778	0	3,614	3,365	68	1,344	2,080
Tuzigoot NM	115,213	0	5,721	5,328	107	2,128	3,293
Ulysses S. Grant NHS	25,758	0	1,663	1,548	29	720	1,120
Upper Delaware SRR	200,338	0	5,651	4,899	98	1,701	2,630
USS Arizona Memorial	1,542,757	0	55,916	50,062	940	23,273	36,194
*Valley Forge NHP	1,340,679	2,000	45,540	33,192	793	15,377	24,036
Vanderbilt Mansion NHS	391,899	0	11,499	9,704	182	4,511	7,016
Vicksburg NMP	676,605	0	33,600	31,288	629	12,495	19,339
Vietnam Veterans Memorial	3,629,739	0	104,894	95,412	1,792	44,357	68,982
*Virgin Islands NP	677,289	122,986	80,300	80,300	1,919	39,063	59,592
Voyageurs NP	231,875	23,225	11,593	11,034	220	3,831	5,924
Walnut Canyon NM	120,820	0	6,000	5,587	112	2,231	3,453
War in the Pacific NHP	40,005	0	1,391	1,295	26	450	695
Washington Monument	586,603	0	16,952	27,448	548	13,561	21,090
Washita Battlefield NHS	14,408	0	510	476	9	165	255
Weir Farm NHS	11,795	0	761	709	13	330	513
Whiskeytown-Shasta-Trinity	749,979	55,998	30,903	27,023	544	10,792	16,703
White House	481,951	0	13,928	12,669	238	5,890	9,159
White Sands NM	440,927	1,048	22,443	22,135	441	7,685	11,883
Whitman Mission NHS	52,849	0	1,837	1,711	34	594	918
William Howard Taft NHS	14,720	0	950	885	17	411	640
Wilson's Creek NB	141,677	0	7,036	6,552	132	2,616	4,050
Wind Cave NP	591,049	5,279	41,967	39,863	802	15,920	24,640
Wolf Trap Farm Park	490,547	0	31,669	29,490	554	13,710	21,321
Women's Rights NHP	16,146	0	511	490	10	170	263
Wrangell-St Elias NP & Pres	50,336	0	2,503	2,377	47	825	1,276
Wright Brothers NMem	466,144	0	16,204	15,089	301	5,239	8,100

**Table A-1. Spending and Local Economic Impacts by Park, CY 2006**

Park Unit	Public Use Data		Visitor Spending 2006		Impacts of Non-Local Visitor Spending		
	2006 Recreation Visits	2006 OVN stays	All Visitors (\$ 000's)	Non-Local Visitors (\$ 000's)	Jobs	Personal Income (\$ 000's)	Value Added (\$ 000's)
Wupatki NM	236,449	0	11,742	10,934	220	4,367	6,758
Yellowstone NP	2,870,295	1,141,164	296,263	282,059	5,673	112,642	174,341
*Yosemite NP	3,242,644	1,568,625	261,475	236,349	4,688	114,969	176,181
Yukon-Charley Rivers Npres	12,083	24,722	693	675	13	235	363
Zion NP	2,567,350	274,878	98,639	93,757	1,886	37,442	57,951

\* Results are based on a visitor survey at the designated park that included spending data. For these parks the full MGM2 model is used along with custom multipliers for the local region. For other parks, a variation of the MGM2 shortform model is employed along with MGM2 generic multipliers.

a. Sequoia and Kings Canyon National Parks are combined for the economic analysis. Recreation visits for the two parks are reduced to reflect double counting between the two parks

**Table A-2. Payroll Impacts on Local Economies by Park, FY 2006**

Park Unit	Park Payroll			Impacts of Park Payroll		
	Salary	Payroll Benefits	NPS Jobs	Total Jobs	Personal Income (\$000's)	Value Added (\$000's)
Abraham Lincoln Birthplace NHS	\$ 668,171	\$ 158,518	16	22	\$ 960	\$ 1,061
Acadia NP	5,975,508	1,475,573	144	201	9,124	10,439
Adams NHS	1,167,720	278,406	26	39	1,831	2,088
Agate Fossil Beds NM	383,692	93,518	10	13	554	612
Allegheny Portage Railroad NHS	1,333,112	441,341	25	38	2,148	2,441
Amistad NRA	1,938,370	610,298	46	62	2,936	3,227
Andersonville NHS	804,271	205,246	17	24	1,170	1,291
Andrew Johnson NHS	439,227	102,016	9	13	664	761
Antietam NB	2,219,675	626,157	53	74	3,467	3,956
Apostle Islands NL	2,067,470	585,784	40	56	3,067	3,377
Appomattox Court House NHP	908,399	244,701	20	29	1,407	1,607
Arches NP	845,601	247,113	22	29	1,262	1,389
Arkansas Post NMem	459,324	133,491	11	15	685	754
Arlington House, The Robert E. Lee Mem	681,587	195,991	17	25	1,103	1,252
Assateague Island NS	3,226,619	812,201	76	106	4,942	5,652
Aztec Ruins NM	870,336	242,635	22	31	1,357	1,548
Badlands NP	3,024,586	805,075	71	96	4,435	4,888
Bandelier NM	2,791,528	815,098	75	101	4,388	5,002
Bent's Old Fort NHS	736,575	188,171	17	23	1,072	1,183
Bering Land Bridge Npres	186,082	38,374	3	6	286	327
Big Bend NP	4,544,365	1,290,561	111	148	6,744	7,425
Big Cypress Npres	4,433,911	1,191,457	79	127	7,089	8,064
Big South Fork NRRRA	2,651,972	833,383	50	71	4,016	4,414
Big Thicket NPres	2,010,450	634,351	50	69	3,208	3,650
Bighorn Canyon NRA	2,700,747	683,390	54	76	3,924	4,329
Biscayne NP	2,382,839	692,783	47	73	3,862	4,386
Black Canyon of the Gunnison NP	812,299	227,320	18	25	1,202	1,324
Blue Ridge Parkway	11,279,839	3,055,889	246	353	17,494	19,976
Bluestone NSR	4,487,686	1,331,933	91	134	7,076	8,063
Booker T. Washington NM	540,252	168,611	11	16	860	979
Boston African American NHS	407,365	82,834	13	18	625	714
Boston NHP	5,534,655	1,506,997	103	164	8,868	10,086
Brown V. Board of Education NHS	678,766	214,021	15	22	1,117	1,266
Bryce Canyon NP	2,550,131	674,533	74	94	3,735	4,117
Buck Island Reef NM	267,945	67,988	5	8	390	430
Buffalo National River	3,934,344	1,195,358	93	124	5,917	6,507
Cabrillo NM	1,167,745	325,610	27	40	1,879	2,136
Canaveral NS	1,970,815	541,559	43	62	3,064	3,498
Cane River Creole NHP	675,953	162,430	22	27	974	1,075

**Table A-2. Payroll Impacts on Local Economies by Park, FY 2006**

Park Unit	Park Payroll			Impacts of Park Payroll		
	Salary	Payroll Benefits	NPS Jobs	Total Jobs	Personal Income (\$000's)	Value Added (\$000's)
Canyon de Chelly NM	1,441,776	307,130	44	58	2,153	2,470
Canyonlands NP	4,539,442	1,303,648	118	155	6,751	7,432
Cape Cod NS	5,829,509	1,429,616	128	175	8,425	9,299
Cape Hatteras NS	4,959,373	1,267,338	111	151	7,219	7,962
Cape Lookout NS	2,236,471	439,260	52	70	3,123	3,458
Capitol Reef NP	1,397,473	389,950	30	41	2,067	2,277
Capulin Volcano NM	470,213	135,083	11	15	699	770
Carl Sandburg Home NHS	733,053	199,061	18	25	1,137	1,299
Carlsbad Caverns NP	4,078,701	1,057,838	99	138	6,279	7,176
Casa Grande Ruins NM	513,765	174,121	11	15	791	868
Castillo de San Marcos NM	1,498,052	413,964	36	52	2,406	2,736
Castle Clinton NM	309,369	92,329	6	10	504	572
Catoctin Mountain Park	1,940,215	499,979	48	66	2,983	3,410
Cedar Breaks NM	405,811	65,825	11	15	553	614
Central High School	444,106	120,990	14	18	689	787
Chaco Culture NHP	1,363,085	349,751	28	41	2,095	2,394
Chamizal NMem	1,196,588	344,430	27	40	1,936	2,199
Channel Islands NP	4,067,805	1,065,345	81	125	6,476	7,370
Charles Pinckney NHS	362,834	106,853	7	10	571	651
Chattahoochee River NRA	2,040,064	545,289	40	62	3,259	3,707
Chesapeake & Ohio Canal NHP	5,488,126	1,497,138	119	171	8,522	9,729
Chickamauga & Chattanooga NMP	1,825,116	502,503	45	62	2,839	3,240
Chickasaw NRA	2,698,905	732,067	76	97	3,971	4,376
Chiricahua NM	1,015,482	295,442	24	34	1,595	1,819
Christiansted NHS	225,978	52,692	10	12	324	358
City of Rocks NRES	10,334	2,014	3	3	15	18
Clara Barton NHS	321,808	80,856	11	14	509	580
Colonial NHP	4,643,612	1,363,150	93	137	7,307	8,329
Colorado NM	880,062	245,067	20	29	1,372	1,565
Congaree Swamp NM	603,467	171,375	14	20	944	1,077
Coronado Nmem	584,133	198,538	11	16	899	987
Cowpens NB	357,789	102,928	11	14	561	640
Crater Lake NP	3,823,367	939,776	88	125	5,834	6,675
Craters of the Moon NM	789,581	235,859	17	23	1,183	1,302
Cumberland Gap NHP	2,149,398	657,222	56	77	3,408	3,881
Cumberland Island NS	1,454,682	467,717	31	45	2,330	2,650
Curecanti NRA	2,197,992	566,076	47	68	3,380	3,863
Cuyahoga Valley NP	7,232,525	1,995,697	161	241	11,615	13,206
Dayton Aviation Heritage NHP	1,039,313	248,278	28	40	1,631	1,859
De Soto Nmem	320,925	99,298	9	12	526	597

**Table A-2. Payroll Impacts on Local Economies by Park, FY 2006**

Park Unit	Park Payroll			Impacts of Park Payroll		
	Salary	Payroll Benefits	NPS Jobs	Total Jobs	Personal Income (\$000's)	Value Added (\$000's)
Death Valley NP	5,660,952	1,449,004	129	174	8,242	9,091
Delaware Water Gap NRA	6,645,309	1,714,737	122	185	10,221	11,683
Denali NP & Pres	9,483,802	2,007,471	180	270	14,147	16,233
Devils Postpile NM	239,386	60,052	7	9	347	383
Devils Tower NM	897,313	185,437	23	30	1,262	1,397
Dinosaur NM	2,206,153	561,961	56	73	3,209	3,540
Dry Tortugas NP	599,976	188,591	12	19	987	1,119
Edgar Allan Poe NHS	284,571	88,802	7	11	467	530
Edison NHS	1,351,373	339,948	23	38	2,137	2,435
Effigy Mounds NM	811,484	151,371	25	31	1,125	1,247
Eisenhower NHS	909,743	229,395	18	27	1,394	1,594
El Malpais NM	1,117,631	303,298	26	35	1,644	1,812
El Morro NM	485,658	126,812	13	17	710	782
Eleanor Roosevelt NHS	224,241	45,639	8	10	315	348
Eugene O'Neill NHS	219,576	63,889	5	8	356	404
Everglades NP	14,985,307	3,984,171	278	443	23,915	27,211
Federal Hall NMem	206,947	40,073	6	8	315	361
Fire Island NS	2,943,267	688,816	59	87	4,456	5,104
First Ladies NHS	30,025	8,528	1	1	47	54
Florissant Fossil Beds NM	551,564	162,288	14	19	868	990
Ford's Theatre NHS	897,630	239,773	19	29	1,434	1,631
Fort Bowie NHS	282,987	94,197	7	10	456	519
Fort Caroline NMem	1,414,257	391,827	29	45	2,273	2,584
Fort Davis NHS	751,903	206,479	19	25	1,109	1,222
Fort Donelson NB	744,553	210,230	17	23	1,104	1,215
Fort Frederica NM	476,767	147,076	9	14	757	862
Fort Laramie NHS	932,761	252,138	24	31	1,371	1,511
Fort Larned NHS	784,430	212,851	20	26	1,154	1,272
Fort Matanzas NM	40,416	17,267	1	2	71	80
Fort McHenry NM & HS	1,243,498	300,494	28	42	1,954	2,228
Fort Necessity NB	1,054,497	332,785	21	29	1,598	1,756
Fort Point NHS	281,881	57,204	6	9	432	494
Fort Pulaski NM	664,771	183,576	15	21	1,034	1,181
Fort Raleigh NHS	230,031	65,777	5	7	342	376
Fort Scott NHS	815,228	195,034	17	24	1,173	1,296
Fort Smith NHS	546,632	155,946	13	18	856	976
Fort Stanwix NM	742,306	194,001	18	24	1,085	1,196
Fort Sumter NM	1,248,797	356,338	28	42	2,017	2,292
Fort Union NM	559,605	131,081	17	21	803	887
Fort Union Trading Post NHS	489,186	109,058	13	16	696	769

**Table A-2. Payroll Impacts on Local Economies by Park, FY 2006**

Park Unit	Park Payroll			Impacts of Park Payroll		
	Salary	Payroll Benefits	NPS Jobs	Total Jobs	Personal Income (\$000's)	Value Added (\$000's)
Fort Vancouver NHS	1,111,648	299,745	26	37	1,723	1,967
Fossil Butte NM	450,727	120,986	11	14	662	729
Frederick Douglass NHS	333,430	67,139	10	14	511	584
Frederick Law Olmsted NHS	1,106,085	299,473	22	34	1,771	2,014
Fredericksburg & Spotsylvania NMP	2,533,898	641,274	52	76	3,885	4,442
Friendship Hill NHS	286,187	110,561	6	9	491	554
Gates of the Arctic NP & Pres	1,304,347	300,165	32	42	1,865	2,061
Gateway NRA	16,480,870	3,817,921	339	520	25,737	29,363
Gauley River NRA	159,528	65,278	3	5	269	305
General Grant NMem	489,665	137,966	13	18	789	897
George Rogers Clark NHP	533,012	140,594	12	17	823	940
George Washington Birthplace NM	1,037,664	272,223	24	34	1,600	1,829
George Washington Carver NM	599,600	156,112	18	24	924	1,056
George Washington Memorial Pkwy	5,560,525	1,554,329	114	175	8,950	10,173
Gettysburg NMP	4,454,356	1,044,689	83	126	6,746	7,726
Gila Cliff Dwellings NM	190,625	34,533	4	6	263	292
Glacier Bay NP & Pres	3,784,248	871,675	64	94	5,413	5,980
Glacier NP	11,957,409	2,658,977	289	403	17,964	20,595
Glen Canyon NRA	7,642,093	2,177,873	159	232	11,960	13,641
Golden Gate NRA	12,016,044	3,039,106	241	373	19,020	21,664
Golden Spike NHS	554,665	147,826	12	18	858	980
Governors Island NM	558,062	142,449	12	18	885	1,007
Grand Canyon NP	21,838,528	5,850,159	505	713	33,803	38,608
Grand Portage NM	584,908	162,957	13	18	865	953
Grand Teton NP	9,573,266	2,457,706	226	317	14,711	16,818
Grant-Kohrs Ranch NHS	897,424	245,277	21	28	1,322	1,457
Great Basin NP	1,984,958	510,639	43	59	2,893	3,190
Great Sand Dunes NM	1,437,736	394,251	33	44	2,120	2,335
Great Smoky Mountains NP	14,387,198	4,283,209	353	511	23,418	26,583
Greenbelt Park	605,103	139,989	13	20	945	1,078
Guadalupe Mountains NP	1,690,459	523,939	38	54	2,688	3,060
Guilford Courthouse NMP	493,300	147,897	11	16	779	888
Gulf Islands NS	4,511,022	1,256,595	105	148	7,031	8,023
Hagerman Fossil Beds NM	523,984	141,127	14	18	770	849
Haleakala NP	3,660,852	946,592	87	121	5,632	6,438
Hamilton Grange NMem	143,942	38,479	5	6	230	262
Hampton NHS	728,344	151,961	17	25	1,121	1,281
Harpers Ferry NHP	4,401,247	1,236,595	112	154	6,870	7,838
Harry S Truman NHS	667,169	185,706	15	22	1,073	1,220
Hawaii Volcanoes NP	6,321,569	1,616,065	138	198	9,708	11,098



**Table A-2. Payroll Impacts on Local Economies by Park, FY 2006**

Park Unit	Park Payroll			Impacts of Park Payroll		
	Salary	Payroll Benefits	NPS Jobs	Total Jobs	Personal Income (\$000's)	Value Added (\$000's)
Herbert Hoover NHS	687,652	164,092	17	23	1,044	1,196
Home of Franklin D. Roosevelt N	683,310	180,014	16	23	1,055	1,205
Homestead National Monument of America	658,115	212,139	18	23	1,002	1,101
Hopewell Culture NHP	734,389	159,158	20	26	1,040	1,151
Hopewell Furnace NHS	907,518	224,682	21	29	1,386	1,586
Horseshoe Bend NMP	417,905	126,338	10	14	661	753
Hot Springs NP	3,220,618	964,917	82	113	5,087	5,796
Hovenweep NM	306,094	107,696	7	10	499	567
Hubbell Trading Post NHS	683,627	143,098	16	23	1,018	1,169
Independence NHP	11,172,607	3,112,469	216	339	17,972	20,430
Indiana Dunes NL	6,156,903	1,799,838	115	164	9,188	10,112
Isle Royale NP	2,648,316	665,778	57	79	3,844	4,241
James A. Garfield NHS	101,231	28,057	2	3	163	185
Jean Lafitte NHP & PRES	2,805,704	823,536	64	90	4,415	5,032
Jefferson National Expansion Memorial	7,249,891	2,188,427	177	256	11,831	13,426
Jewel Cave NM	714,974	158,276	21	28	1,073	1,231
Jimmy Carter NHS	711,916	220,527	16	22	1,075	1,182
John D Rockefeller Jr. Mem Pkwy	327,445	97,816	7	10	517	589
John Day Fossil Beds NM	921,391	222,717	21	29	1,328	1,467
John Fitzgerald Kennedy NHS	230,263	53,499	5	7	360	410
John Muir NHS	463,699	117,348	10	15	734	836
Johnstown Flood Nmem	414,272	119,085	8	12	649	740
Joshua Tree NP	4,473,504	1,242,279	115	164	7,192	8,176
Kalaupapa NHP	1,908,604	523,082	40	58	2,966	3,386
Kaloko-Honokohau NHP	1,039,620	262,847	22	31	1,594	1,822
Katmai NP & Pres/Aniakchak	2,088,014	437,384	39	56	2,943	3,256
Kenai Fjords NP	1,991,660	430,686	40	59	2,980	3,418
Kennesaw Mountain NBP	800,190	212,220	15	23	1,276	1,453
Kings Mountain NMP	616,946	153,091	17	23	943	1,079
Klondike Gold Rush NHP Alaska	331,348	101,069	9	12	542	615
Klondike Gold Rush NHP Seattle	1,720,852	360,497	32	46	2,426	2,684
Knife River Indian Villages NHS	457,421	124,506	12	15	673	742
Lake Clark NP & Pres	1,434,811	365,655	24	37	2,202	2,518
Lake Mead NRA	11,768,507	3,160,099	274	368	17,282	19,048
Lake Meredith NRA	1,752,709	542,323	45	61	2,786	3,171
Lake Roosevelt NRA	3,055,570	846,748	67	92	4,513	4,972
Lassen Volcanic NP	3,681,247	954,353	74	114	5,850	6,660
Lava Beds NM	1,445,698	376,035	34	48	2,227	2,545
LBJ Memorial Grove on the Potomac	90,512	31,346	9	10	152	172
Lewis & Clark National Historic	1,099,798	267,890	28	39	1,676	1,918

**Table A-2. Payroll Impacts on Local Economies by Park, FY 2006**

Park Unit	Park Payroll			Impacts of Park Payroll		
	Salary	Payroll Benefits	NPS Jobs	Total Jobs	Personal Income (\$000's)	Value Added (\$000's)
Lincoln Boyhood NMem	579,946	155,759	15	20	898	1,026
Lincoln Home NHS	1,720,826	404,570	43	60	2,607	2,986
Little Bighorn Battlefield NM	867,678	194,038	22	29	1,235	1,365
Little River Canyon NPRES	648,492	178,135	17	22	956	1,054
Longfellow NHS	698,913	182,976	14	21	1,092	1,231
Lowell NHP	5,139,981	1,351,751	102	159	8,188	9,319
Lyndon B. Johnson NHP	2,339,853	675,322	52	78	3,787	4,302
Maggie L Walker NHS	384,273	94,048	13	17	586	670
Mammoth Cave NP	5,651,130	1,398,833	156	202	8,180	9,028
Manassas NBP	1,636,228	470,764	28	46	2,647	3,007
Manzanar NHS	640,162	188,975	15	21	957	1,053
Marsh-Billings Rockefeller NHP	1,027,241	231,038	23	33	1,546	1,772
Martin Luther King Jr NHS	1,816,497	431,969	43	63	2,848	3,248
Martin Van Buren NHS	815,797	178,332	18	25	1,157	1,280
Mary McLeod Bethune Council House NHS	358,402	94,148	8	12	571	650
Mesa Verde NP	5,481,494	1,291,738	142	194	8,308	9,514
Minute Man NHP	1,680,899	454,505	34	52	2,690	3,060
Minuteman Missile NHS	348,460	116,464	10	13	535	587
Missouri National Recreational	360,371	95,701	9	12	564	636
Mojave Npres	2,994,658	866,018	64	92	4,699	5,358
Monocacy NB	797,712	236,333	17	25	1,297	1,473
Montezuma Castle NM	1,393,135	337,445	37	50	2,121	2,427
Moore's Creek NB	349,862	78,017	9	12	498	550
Morristown NHP	1,495,063	438,150	30	44	2,352	2,681
Mount Rainier NP	9,033,936	2,194,915	207	293	13,758	15,746
Mount Rushmore Nmem	3,226,883	961,964	74	105	5,092	5,802
Muir Woods NM	454,071	115,595	8	13	720	819
Natchez NHP	841,860	245,290	21	29	1,323	1,508
Natchez Trace Parkway	6,583,661	2,154,738	144	207	10,582	12,030
National Capital Parks Central	13,331,646	3,451,521	284	431	21,183	24,116
National Capital Parks East	6,890,611	1,824,257	148	224	10,989	12,505
Natural Bridges NM	302,956	81,862	6	9	470	536
Navajo NM	618,069	134,683	16	22	926	1,062
New Bedford Whaling NHP	373,493	102,929	7	11	600	682
New Orleans Jazz NHP	240,016	78,589	6	8	386	439
New River Gorge NR	615,205	103,870	17	23	891	1,027
Nez Perce NHP	1,637,487	457,067	40	53	2,422	2,668
Nicodemus NHS	205,930	57,690	5	6	305	336
Ninety Six NHS	318,614	90,486	8	11	498	568
Niobrara NSR	342,375	108,118	8	11	519	570

**Table A-2. Payroll Impacts on Local Economies by Park, FY 2006**

Park Unit	Park Payroll			Impacts of Park Payroll		
	Salary	Payroll Benefits	NPS Jobs	Total Jobs	Personal Income (\$000's)	Value Added (\$000's)
North Cascades NP	6,458,111	1,681,350	170	232	9,948	11,369
Obed Wild and Scenic River	413,811	125,305	11	15	655	746
Ocmulgee NM	555,897	159,059	14	19	871	993
Olympic NP	9,459,852	2,350,356	212	302	14,459	16,540
Oregon Caves NM	778,885	173,439	21	29	1,170	1,342
Organ Pipe Cactus NM	2,123,889	662,143	38	58	3,381	3,848
Ozark National Scenic Riverways	4,598,220	1,343,365	95	138	7,229	8,241
Padre Island NS	2,746,956	747,653	65	91	4,264	4,868
Palo Alto Battlefield NHS	444,944	130,635	13	16	665	731
Pea Ridge NMP	679,917	176,553	20	27	1,047	1,196
Pecos NHP	977,608	295,285	19	27	1,468	1,615
Perry's Victory and Internatl Peace Mem	740,217	195,006	17	23	1,083	1,194
Petersburg NB	1,872,045	499,851	38	56	2,896	3,308
Petrified Forest NP	2,416,567	666,440	53	76	3,760	4,291
Petroglyph NM	1,086,331	299,188	23	35	1,744	1,983
Pictured Rocks NL	1,391,967	334,642	28	39	2,005	2,214
Pinnacles NM	1,988,870	535,467	40	56	2,922	3,220
Pipe Spring NM	606,605	161,862	15	21	938	1,072
Pipestone NM	552,189	150,112	13	17	813	896
Piscataway Park	358,308	104,627	7	11	581	660
Point Reyes NS	5,814,700	1,563,539	124	188	9,297	10,576
Prince William Forest Park	1,645,719	462,245	42	61	2,651	3,013
Pu'uuhonua o Honaunau NHP	1,007,203	263,075	23	33	1,552	1,774
Puukohola Heiau NHS	445,609	82,149	11	15	653	751
Rainbow Bridge NM	164,719	48,521	4	6	259	296
Redwood NP	5,563,872	1,581,611	121	174	8,703	9,927
Richmond NBP	1,526,726	442,776	33	47	2,397	2,733
Rio Grande Wild and Scenic River	122,042	44,939	4	5	191	210
Rock Creek Park	3,311,362	857,109	74	111	5,261	5,990
Rocky Mountain NP	11,354,634	2,822,966	278	369	16,449	18,152
Roger Williams Nmem	252,042	74,849	6	9	410	466
Russell Cave NM	241,459	57,254	8	10	366	419
Sagamore Hill NHS	991,648	246,030	23	34	1,565	1,783
Saguaro NP	2,799,808	834,379	71	98	4,418	5,034
Saint Croix NSR	2,362,468	631,391	50	69	3,466	3,821
Saint Paul's Church NHS	28,032	10,272	1	1	48	54
Saint-Gaudens NHS	789,842	232,498	16	23	1,243	1,417
Salem Maritime NHS	1,332,915	342,366	31	46	2,115	2,408
Salinas Pueblo Missions NM	961,553	237,400	28	36	1,391	1,535
San Antonio Missions NHP	2,031,304	649,387	47	69	3,351	3,798

**Table A-2. Payroll Impacts on Local Economies by Park, FY 2006**

Park Unit	Park Payroll			Impacts of Park Payroll		
	Salary	Payroll Benefits	NPS Jobs	Total Jobs	Personal Income (\$000's)	Value Added (\$000's)
San Francisco Maritime NHP	4,856,123	1,285,796	76	130	7,744	8,813
San Juan Island NHP	509,714	122,965	11	16	801	913
San Juan NHS	3,022,571	786,438	96	124	4,655	5,320
Santa Monica Mountains NRA	5,204,989	1,506,080	100	158	8,429	9,574
Saratoga NHP	1,198,147	341,971	27	37	1,780	1,959
Saugus Iron Works NHS	616,639	169,633	14	21	990	1,125
Scotts Bluff NM	490,293	130,365	13	17	758	866
Sequoia NP/ Kings Canyon NP	13,436,382	3,395,759	327	454	20,594	23,550
Shenandoah NP	9,024,880	2,630,620	218	317	14,634	16,619
Shiloh NMP	1,223,683	328,171	28	38	1,797	1,980
Sitka NHP	1,240,620	287,561	24	34	1,776	1,962
Sleeping Bear Dunes NL	3,111,276	678,557	74	99	4,412	4,879
Springfield Armory NHS	763,270	195,428	14	22	1,211	1,378
Statue of Liberty NM	7,127,749	1,935,738	153	231	11,416	12,984
Steamtown NHS	3,290,229	976,537	60	86	4,925	5,418
Stones River NB	681,400	163,525	16	22	1,036	1,186
Tallgrass Prairie NPres	543,218	130,489	14	18	782	864
Thaddeus Kosciuszko NMem	111,637	40,800	4	5	189	214
Theodore Roosevelt Birthplace NHS	209,456	58,723	5	7	337	383
Theodore Roosevelt Inaugural NHS	28,596	8,503	1	2	47	53
Theodore Roosevelt Island	35,758	11,781	1	1	58	65
Theodore Roosevelt NP	1,753,017	501,880	50	64	2,605	2,868
Thomas Stone NHS	212,283	49,380	6	8	332	378
Timpanogos Cave NM	902,423	201,547	30	40	1,402	1,600
Timucuan Ecological & Historic Pres	322	25	1	1	0	1
Tonto NM	632,619	179,855	13	19	990	1,129
Tumacacori NHP	746,627	203,457	17	23	1,099	1,211
Tuskegee Airmen NHS	326,414	105,545	10	13	523	595
Tuskegee Institute NHS	558,018	157,512	13	18	872	995
Tuzigoot NM	11,330	2,990	2	2	18	20
Ulysses S. Grant NHS	613,999	176,145	16	23	993	1,128
Upper Delaware SRR	1,734,662	459,934	30	44	2,542	2,802
USS Arizona Memorial	1,519,934	359,214	34	51	2,381	2,715
Valley Forge NHP	4,751,590	1,296,118	81	126	7,378	8,424
Vanderbilt Mansion NHS	720,653	173,566	20	27	1,132	1,291
Vicksburg NMP	1,679,601	453,197	45	61	2,603	2,973
Virgin Islands NP	3,124,678	860,876	77	102	4,610	5,079
Voyageurs NP	2,634,037	750,407	53	74	3,911	4,306
War in the Pacific NHP	683,267	143,705	15	21	964	1,066
Washita Battlefield NHS	308,492	83,097	10	13	453	500

**Table A-2. Payroll Impacts on Local Economies by Park, FY 2006**

<b>Park Unit</b>	<b>Park Payroll</b>			<b>Impacts of Park Payroll</b>		
	<b>Salary</b>	<b>Payroll Benefits</b>	<b>NPS Jobs</b>	<b>Total Jobs</b>	<b>Personal Income (\$000's)</b>	<b>Value Added (\$000's)</b>
Weir Farm NHS	567,606	170,358	12	18	925	1,050
Whiskeytown-Shasta-Trinity NRA	3,115,700	883,139	85	115	4,871	5,557
White House	5,369,992	1,261,834	104	163	8,404	9,585
White Sands NM	1,043,951	315,382	23	31	1,568	1,725
Whitman Mission NHS	556,383	141,834	12	16	809	893
William Howard Taft NHS	379,042	112,123	9	13	616	700
Wilson's Creek NB	1,335,122	367,978	31	43	2,077	2,371
Wind Cave NP	2,509,074	714,836	66	90	3,926	4,478
Wolf Trap Farm Park	2,505,275	543,037	67	94	3,875	4,426
Women's Rights NHP	753,217	201,748	15	21	1,106	1,219
Wrangell-St Elias NP & Pres	3,345,348	693,280	58	85	4,708	5,209
Wright Brothers NMem	453,337	107,259	12	16	651	719
Wupatki NM	2,290,368	596,522	49	71	3,528	4,032
Yellowstone NP	27,395,675	7,157,180	596	856	42,224	48,251
Yosemite NP	28,114,818	7,085,167	710	935	40,823	45,040
Yukon-Charley Rivers Npres	955,517	233,615	26	33	1,380	1,524
Zion NP	7,085,025	1,888,215	190	257	10,957	12,516

**Table A-3. Payroll Impacts on Local Economies, Administrative Units and Parks without Visit Counts, 2006**

Park Unit	Park Payroll			Impacts of Park Payroll		
	Salary	Payroll Benefits	Jobs	Jobs	Personal Income (000's)	Value Added (000's)
Administration Team Coord, PGSO	16,010,228	2,807,097	251	411	23,620	26,822
Administrative Program Cntr	1,219,095	266,342	19	32	1,888	2,156
Ala Kahakai NHT	73,269	21,581	1	2	115	131
Alaska Regional Office	4,339,843	856,758	62	109	6,629	7,584
American Memorial Park	474,247	110,774	11	15	718	822
Anacostia Park	3,966	630	1	1	6	7
Anchorage Interagency Visitors Center	439,135	92,576	10	15	677	773
Appalachian NST	629,637	164,625	10	17	1,002	1,141
Associate Reg Dir, Administration	8,704,192	1,998,699	223	318	13,575	15,490
Biological Resources Mgmt Division	1,581,038	361,686	20	37	2,464	2,812
Blackstone River Valley NHC	799,702	220,442	14	23	1,284	1,460
Boston Harbor Islands NRA	593,916	145,425	12	18	935	1,066
Boston Support Office	995,648	249,838	17	28	1,574	1,793
Cedar Creek And Belle Grove NHP	211,253	48,168	3	5	323	365
Center For Urban Ecology	388,065	114,952	8	12	631	716
Chesapeake Bay Program Office	804,802	217,267	12	21	1,288	1,465
Chihuahuan Desert Network	154,458	48,001	3	5	253	287
Columbia Cascades SO	5,314,792	1,295,297	85	138	8,205	9,267
Conservation Study Institute	61,325	7,709	1	2	89	103
Denver Service Center	17,437,076	4,171,891	418	609	27,363	31,199
Ebey's Landing NHRES	191,677	57,267	4	6	303	345
Erie Canalway National Heritage Corridor	358,905	89,618	14	17	549	628
Fairbanks Interagency Visitors Center	238,473	46,006	5	7	351	404
Flagstaff Areas	39,831	8,855	2	3	62	71
Fletc (Fed Law Enforcement Trg Cntr)	1,653,861	505,255	69	87	2,705	3,069
Flight 93 NMEM	281,783	65,287	5	7	403	446
Glen Echo Park	352,990	99,438	11	14	551	629
Gloria Dei Church NHS	24,555	7,881	2	2	39	45
Great Falls Park Virginia	686,720	183,650	19	26	1,097	1,248
Great Lakes Network	569,143	171,894	13	19	929	1,054
Greater Yellowstone Network	402,020	96,823	8	13	632	720
Harpers Ferry Center	9,295,740	2,266,017	228	317	14,165	16,210
Heartland Network	426,225	140,346	10	15	707	801
Historic Preservation Training Cntr (HPTC)	1,978,154	501,088	51	73	3,132	3,567
Horace Albright Training Cntr	890,871	218,698	16	26	1,404	1,600
Ice Age NST	216,597	49,482	4	6	327	374
Illinois & Michigan Canal NHC	0	0	1	1	0	0
Intermountain Regional Office	27,750,848	5,732,090	496	801	42,641	48,746

**Table A-3. Payroll Impacts on Local Economies, Administrative Units and Parks without Visit Counts, 2006**

Park Unit	Park Payroll			Impacts of Park Payroll		
	Salary	Payroll Benefits	Jobs	Jobs	Personal Income (000's)	Value Added (000's)
Intermountain NR-Pro	972,632	254,374	22	32	1,548	1,762
Job Corps Program	1,398,995	381,422	62	76	2,200	2,480
Juan Bautista De Anza NHT	138,704	43,369	2	4	221	251
Kenai Fjords Lands	8,368,987	1,797,791	160	227	11,841	13,096
Keweenaw NHP	1,162,561	263,064	22	31	1,658	1,833
Land Acquisition Project Office	610,021	149,221	9	15	942	1,064
Lewis & Clark NHT	1,609,778	444,501	31	47	2,505	2,859
Lower East Side Tenement Museum NHS	1,347	329	1	1	2	2
Manhattan Sites	937,054	244,628	19	30	1,491	1,697
Mather Training Cntr	667,104	164,313	11	18	1,052	1,198
Midwest Archeological Center	1,369,639	335,371	31	45	2,116	2,390
Midwest Regional Office	13,689,007	3,265,949	230	381	21,472	24,484
Minidoka Internment NM	147,222	35,301	3	5	224	256
Mississippi NR&RA	1,474,278	370,608	28	43	2,287	2,582
Museum Resources Ctr	488,825	113,559	8	13	764	871
National Capital Regional Office	3,159,368	695,638	71	106	4,898	5,593
National Information Systems Cntr	777,251	186,639	13	22	1,220	1,391
National Information Technology Cntr	556,981	132,320	7	13	873	996
National Interagency Fire Center	3,256,629	892,989	51	83	5,127	5,778
National Mall	3,074,740	841,670	60	94	4,931	5,608
National Parks Of New York Harbor	360,766	80,715	5	9	561	640
National Trails System, Salt Lake City	366,807	85,726	6	10	563	636
National Trails System, Santa Fe	1,036,802	246,847	20	31	1,595	1,802
Natl Ctr For Rec & Conservation	1,429,196	360,372	18	33	2,261	2,576
NER Historic Architecture Program	550,148	112,191	10	16	827	937
New Jersey Coastal Heritage Trail Route	6,135	1,852	1	1	10	11
North Country NT	225,957	50,728	3	6	344	390
Northeast Education Services Center	172,395	49,407	3	5	274	308
Northeast Museum Services Center	740,319	212,425	15	22	1,175	1,323
Northeast Regional Office	19,353,002	4,549,300	275	469	29,708	33,579
Northern Colorado Plateau Network	560,700	165,118	12	18	911	1,034
Northern Great Plains Network	196,606	67,185	4	6	329	372
NP Of American Samoa	469,391	113,501	12	16	714	818
Office Of Mexico & Latin American Affairs	0	0	1	1	0	0
Office Of The Chief Information Officer	4,813,823	1,097,363	61	114	7,500	8,559
Office Of The Director	77,332,824	16,930,379	1105	1,956	119,783	136,796
Office Of The Utah State Coordinator	189,870	32,280	2	4	279	317
Office Of Wyoming State Coordinator	93,490	22,485	1	2	144	163
OJCC Housing	5,297	1,784	1	1	9	10

**Table A-3. Payroll Impacts on Local Economies, Administrative Units and Parks without Visit Counts, 2006**

Park Unit	Park Payroll			Impacts of Park Payroll		
	Salary	Payroll Benefits	Jobs	Jobs	Personal Income (000's)	Value Added (000's)
Old Post Office Tower	414,168	108,270	9	14	659	750
Olmstead Center For Landscape Preservation	606,045	166,939	14	20	955	1,076
Overmountain Victory NHT	91,971	18,932	3	4	138	157
Pacific Island Support Office	826,116	170,137	12	20	1,244	1,409
Pacific West Regional Office	6,657,283	1,490,171	118	184	10,145	11,476
Parashant National Monument	448,346	133,223	8	12	716	806
Pinelands NPRES (Interp Pgm)	134,973	39,683	3	4	215	242
Potomac Heritage NST	17,033,132	4,628,296	227	414	27,282	31,030
Presidio Of San Francisco	7,478,607	2,229,165	146	228	12,176	13,821
Rocky Mountain Network	286,079	85,615	5	8	466	529
Roosevelt-Vanderbilt Headquarters	1,469,981	386,734	24	40	2,342	2,665
Rosie The Riveter/WW II Homefront NHP	344,032	84,582	5	9	542	618
Saint Croix Island Intl HS	144,652	31,198	3	5	219	248
Salt River Bay NHP & Eco Pres	265,068	70,870	9	12	415	468
Sand Creek Massacre NHS	186,243	51,156	5	6	293	331
SE Archeological Center	1,535,104	368,138	35	50	2,364	2,671
Selma To Montgomery NHT	191,824	46,516	6	8	296	334
Sonoran Desert Network	243,639	70,942	5	8	395	449
Southeast Regional Office	14,734,824	3,575,427	245	393	22,731	25,678
Southern Arizona Group	829,620	248,668	13	22	1,327	1,493
Southern Colorado Plateau Network	421,481	123,919	8	13	684	777
Southern Plains Network	121,615	40,408	2	4	202	229
Spanish Colonial Research Center	105,063	37,884	2	3	174	195
Strategic Planning Division	357,741	64,990	4	8	541	619
United States Park Police	57,964,965	19,172,321	965	1,603	96,266	109,018
Virgin Islands Coral Reef NM	110,337	34,232	5	6	178	200
Washington Training Cntr	491,053	97,701	8	14	751	859
Western Archeol & Conserv Ctr	760,519	182,321	17	24	1,171	1,323
Western Arctic National Parklands	1,730,590	387,464	31	48	2,637	2,983
Yucca House NM	56,073	16,860	2	2	90	101



Table A-4. Impacts of NPS Visitor Spending and Payroll on Local Economies by State, 2006								
State	Recreation Visits	Non-Local Visitors			Payroll Impacts		Combined Impacts	
		Spending (\$000's)	Jobs	Income (\$000's)	Jobs	Income (\$000's)	Jobs	Income (\$000's)
Alabama	790,039	20,116	403	7,514	100	4,416	503	11,929
Alaska	2,471,970	\$ 112,029	2,242	\$ 41,254	1,026	\$ 53,748	3,268	\$ 95,002
American Samoa					32	1,432	32	1,432
Arizona	10,542,157	662,556	15,361	260,824	1,445	68,561	16,805	329,384
Arkansas	2,556,666	122,465	2,458	47,429	314	14,280	2,772	61,710
California	32,566,205	924,533	17,977	424,168	4,407	218,668	22,383	642,835
Colorado	5,289,308	306,052	6,118	111,027	2,275	109,066	8,393	220,093
Connecticut	11,795	709	13	330	18	925	31	1,255
District of Columbia	32,397,264	815,688	15,414	380,508	6,761	385,324	22,176	765,833
Florida	7,983,175	461,752	8,750	207,337	946	49,466	9,696	256,803
Georgia	6,462,784	201,036	3,865	88,649	782	42,076	4,647	130,725
Guam	40,005	1,295	26	450	21	964	47	1,413
Hawaii	5,323,425	290,886	5,784	119,448	509	24,601	6,293	144,049
Idaho	435,806	15,196	286	5,736	186	9,741	472	15,477
Illinois	388,887	17,983	362	7,182	61	2,607	422	9,789
Indiana	2,190,492	47,105	941	16,963	202	10,909	1,143	27,872
Iowa	225,179	8,116	164	3,195	54	2,169	218	5,364
Kansas	125,408	4,754	94	1,765	97	4,531	190	6,296
Kentucky	1,924,683	87,211	1,746	32,364	324	13,957	2,070	46,321
Louisiana	333,508	15,423	310	6,076	126	5,774	436	11,850
Maine	2,083,588	129,476	2,604	51,707	206	9,343	2,810	61,050
Maryland	3,249,642	150,270	2,934	64,757	381	17,980	3,314	82,737
Massachusetts	9,813,899	378,751	7,249	162,526	809	40,984	8,058	203,510
Michigan	1,649,394	44,764	934	15,591	248	11,919	1,182	27,510
Minnesota	605,606	27,282	544	9,472	187	9,609	731	19,081
Mississippi	6,016,266	72,019	1,448	28,761	292	14,149	1,741	42,910
Missouri	4,302,533	157,147	3,036	68,925	507	24,126	3,542	93,051
Montana	3,897,415	236,754	4,759	93,793	937	44,175	5,696	137,968
Nebraska	225,937	7,131	143	2,586	155	7,454	298	10,039
Nevada	5,911,839	174,062	3,470	60,432	347	16,570	3,818	77,002
New Hampshire	25,858	645	14	323	23	1,243	37	1,566
New Jersey	5,708,286	106,880	2,133	43,480	317	16,893	2,451	60,373
New Mexico	1,620,457	68,429	1,366	25,894	570	26,178	1,936	52,072
New York	15,154,997	313,554	5,948	142,168	1,122	55,023	7,070	197,191
North Carolina	20,091,486	644,353	12,544	269,953	740	34,900	13,284	304,853
North Dakota	472,986	21,765	434	7,557	95	3,975	529	11,532
Ohio	2,704,686	44,721	853	20,277	346	16,195	1,199	36,472
Oklahoma	1,358,201	34,111	680	11,843	110	4,424	790	16,267

**Table A-4. Impacts of NPS Visitor Spending and Payroll on Local Economies by State, 2006**

State	Recreation Visits	Non-Local Visitors			Payroll Impacts		Combined Impacts	
		Spending (\$000's)	Jobs	Income (\$000's)	Jobs	Income (\$000's)	Jobs	Income (\$000's)
Oregon	806,344	44,097	905	15,093	221	10,008	1,126	25,101
Pennsylvania	8,840,722	309,313	6,739	131,449	1,487	84,762	8,226	216,211
Puerto Rico	1,167,558	53,992	1,086	21,562	124	4,655	1,210	26,217
Rhode Island	52,671	3,166	59	1,472	9	410	68	1,882
South Carolina	1,383,500	44,539	874	18,869	124	5,673	998	24,542
South Dakota	3,703,047	138,712	2,814	53,836	343	15,626	3,157	69,461
Tennessee	7,758,199	448,227	8,510	202,176	498	23,542	9,008	225,718
Texas	5,488,711	214,250	4,225	86,424	718	33,664	4,943	120,088
Utah	7,840,356	409,395	8,538	156,698	915	41,272	9,453	197,970
Vermont	22,484	1,040	21	415	33	1,546	54	1,961
Virgin Islands	825,613	86,764	2,048	41,307	140	5,917	2,187	47,224
Virginia	23,414,694	419,842	8,300	173,537	1,397	67,176	9,698	240,713
Washington	6,518,791	207,729	4,288	84,308	1,039	48,740	5,327	133,048
West Virginia	1,737,487	59,012	1,144	23,584	642	29,783	1,786	53,367
Wisconsin	442,472	22,575	479	9,146	103	5,471	581	14,617
Wyoming	5,322,531	385,713	6,495	155,189	857	41,019	7,352	196,208
N/A (Jobs Corps)					76	2,200	76	2,200
<b>Total</b>	<b>272,281,049</b>	<b>9,575,585</b>	<b>189,933</b>	<b>4,017,401</b>	<b>35,804.1</b>	<b>1,799,821</b>	<b>225,733</b>	<b>5,817,146</b>

## About the NPS Social Science Program

The role and functions of the NPS Social Science Program are to: provide leadership and direction to the social science activities of the NPS, coordinate social science activities with other programs of the NPS, act as liaison with the USGS Biological Resources Division and other federal agencies on social science activities, provide technical support to parks, park clusters, support offices, and regional offices, and support a program of applied social science research related to national research needs of the NPS.



*For more information contact:*

Dr. Jim Gramann

Visiting Chief Social Scientist

National Park Service

1849 C Street, NW (2300)

Washington, DC 20240

Telephone: (202) 513- 7189

Email: [James\\_Gramann@partner.nps.gov](mailto:James_Gramann@partner.nps.gov)

Web Site: <http://www.nature.nps.gov/socialscience>